# JOURNAL

OF THE

# ASIATIC SOCIETY OF BENGAL

New Series

Vol. XXVI—1930

## Stray Notes on Kābulī Persian

L. BOGDANOV

As implied by the very title of this paper, the present sketch is a mere re-arrangement of the contents of a scrap-book kept by me during my four years' stay at Kabul, from September 1923 to November 1927. Previous to that period, my acquaintance with any natives of Afghanistan was of the slightest, and with the kind of Persian spoken in that country—nil. The first Afghan I ever met in my life was a journeyman who worked in my garden at Tehran in 1907: I remember that he attracted my attention by his unusual headgear, a dark-blue Kābulī *mindīl* with its loose end hanging over his shoulder, which induced me to enter into conversation with the man, whose speech did not, however, differ in any way from that of other journeymen, or did not, at that time, strike me as different It was not until the autumn of 1920 on the occasion of the establishment of an Afghan Legation at Tehran that I came across some other Afghans, who, however, spoke the standard Persian of Tehran, most of them having already been in Persia (as I discovered later on) for some twenty years.

It was only when I arrived in Peshawar on my way to Kabul in August 1923 and met the Afghan Commercial Agent, one Jalāluddīn-Khān, and had a conversation with him that I began to have some misgivings with regard to the idiom I was going to confront for the next four years.

I was not yet acquainted at that time with the interesting little book by Maj. Lorimer [1], which had only recently appeared, nor was I able to connect in my thought the materials presented in W. Ivanow's valuable monograph on the *Ṭabaqāt* of *Anṣārī* [2] with the language actually spoken in our days in Afghanistan.

Neither the "Report on a Linguistic Mission" [3], nor the "Persian Texts from Afghanistan" [4], by Dr. Morgenstierne

---

[1] D. L. R. Lorimer. The Phonology of the Bakhtiari, Badakhshani and Madaglashti Dialects of Modern Persian. With Vocabularies. Royal Asiatic Society Prize Publication Fund, London, 1922.—

[2] W. Ivanow. Tabaqat of Ansari in the old Language of Herat. JRAS, January and July, 1923.—

[3] G. Morgenstierne. Report on a Linguistic Mission to Afghanistan. Instituttet for Sammenlignende Kulturforskning. Serie C 1-2, Oslo. 1926.—

[4] *Idem*. Persian Texts from Afghanistan. Ex Actorum Orientalium volumine VI excerptum. Oslo.—

were yet published, so that I was very much thrown on my own resources for finding out the peculiarities of the Afghan Persian, some hints of which are given by Phillott in the preface to his dictionary[1].

That state of things induced me to start on my arrival in Kabul the scrap-book referred to, in order to facilitate for myself the comprehension of the colloquial Persian of Afghanistan with which I had to do in my every-day work.

The term "Kābulī" adopted by me for the purposes of the present sketch was first introduced, as far as I can see, by Maj. Lorimer, who explains it as "the language of the Afghān court".[2] It is, however, rather to Dr. G. Morgenstierne that I am indebted for that term, which he always used in conversation to denote the local language, when I met him in Kabul, but who gave preference to the more cumbrous expression "Persian of Afghanistan" in the title of his abovementioned "Texts". That definition, if we do not take it too precisely, covers the term Kābulī as used by me in the present sketch to denote the colloquial Persian of Afghanistan, meaning under colloquial the language in its entirety: Kābulī Persian has in fact no literature of its own, and the publications of the government (newspapers, monthlies, *Niẓāmnāma's*)[3], as well as the official letters in all departments, are composed in the same or almost the same language as is used in ordinary speech. That particular state of things gives me the possibility of dealing with these three different aspects of Kābulī Persian as one whole and of applying to it the term "colloquial" in the wider sense of the word. In what follows the words and sentences encountered in printed publications have been accordingly marked: AA. (= Amān-i Afghān)[4] to denote newspapers in general (not necessarily always the newspaper of that name, although most of the examples bearing that mark are derived from that source); MA. (=Majmū'a-i 'Askarīyya)[5] for monthlies in general (most of the examples belonging, however, to the afore-named Afghan military organ); NN. (= Niẓām-nāma)[6] for the law-books published by the last Afghan government (or similar publications). Words and sentences culled from the Afghan official correspondence have been marked in the present sketch OL (=official letter). The

---

[1] D. C. Phillott. Colloquial English-Persian Dictionary in the Roman character, etc., Calcutta, 1914.—

[2] op. laud, p. 129.—

[3] I.e. the law-books published during the reign of Amīr Amānullāh Khan.—

[4] See my Notes on the Afghan Periodical Perss, "Islamic Culture" No. 1, vol. III, p. 134 foll. (p. 9 foll. of the separate reprint).

[5] *Ibid.* p. 143 foll (p. 18 foll. sep. reprint).—

[6] V. s footnote 3.

words and sentences derived from oral intercourse are not specially marked. The presence or the absence of the above marks do in no way imply that the word or sentence thus marked does not occur in all the other categories. Quite on the contrary, the words selected for the purposes of the present sketch are, with a few exceptions, on the average such as are used or could be used in all the three categories, that is the spoken, the written and the printed language. At any rate all the words given in our sketch are used in the spoken language and the above-detailed marks are only intended to indicate the immediate source from which they have been derived.

The alphabet used in writing in Kābulī Persian is the ordinary Persian alphabet as used in Persia itself. One letter, however, or rather sign, which does not exist in standard Persian is sometimes used in Kābulī in connection with foreign names and foreign words felt as such. The sign in question is the ٹ, a letter borrowed from Hindustani, and the names (for the most part European) and words in which it occurs have probably been taken integrally from some Urdū book or newspaper. We may quote as an example of words felt as foreign the word *wālt-sākit* written والٹ ساکٹ, 'a corruption of the English term "wall-socket," in which "*wall*" was confused with "*volts*" by the Afghan (or Indian) electricians. That kind of spelling is, however, met with also in quite ordinary words like چھٹ ( چھت ) "chintz," etc.

## The Spelling

The Kābulī orthography does not present any particular deviations from the rules adopted in standard Persian. The existing peculiarities concern mostly the final ی (*yā*) (whether *izāfat*, *vaḥdat*, *nisbat* or of any other kind) and certain names of countries, in which a regular spelling seems not to have had time to become definitely established.

(1) Very often the final ی of a word is supplied in K. with two dots, which is not customary in P., but is often met with in older literary documents.

(2) The final *yā* (to whatever category it may belong) is spelt after a mute *hā-yi havvaz*, with an *alif*. Thus—

*yā-yi vaḥdat*: K. بیک کلمه ای (AA.)=P. کلمهٔی "a word"
هفته ای یک مراتبه (AA.) "once a week";

*yā-yi ishārat*: K. بدرجه ای بود که (AA.) "it was to such a degree that...;"

*yā-yi nisbat*: شیشه ای (OL.) "of glass";

*yā-yi iẓāfat* (expressed in P. by a mere *hamza*); خانه ای فوقانی (OL.) "the upper room".

(3) The general rule in P. with regard to an unaccentuated *yā* when preceding the 3rd pers. sing. Pres. tense of the verbum substantivum is that the *yā* in question changes its place and becomes a graphically integral part of that verbal form. That rule is not observed in K.:

K. جزاهای ست (NN.) = P. جزاها است "there are punishments".

(4) Some purely colloquial forms are spelt as they are pronounced in current speech:

K. متعهد استند (AA.) = P. متعهد هستند "they are agreed [upon something]";

K. بدوشان (AA.) = P. بایشان "to them";

(5) Names of countries are encountered in different spellings, often on the same page of a newspaper or a letter:

K. المان - المانیا - المانیه = P. المان "Germany"; (although more often جرمني q. v.);

K. تورکیه - ترکیه = P. عثماني "Turkey";

K. ایتالی - ایطالی - ایطالیه - ایطالیا = P. ایطالیه "Italy";

K برطانیا - برطانیه = P. انگلیس "[Great] Britain".

Certain of these double spellings -*yā* <- *ya* ( یا < یه ) are no doubt based on the peculiar pronunciation of the final short-*a* in K. (see below), as also the very often occurring

(6) به instead of با "with":

K. به کمال میل OL. = P. با کمال میل "*with* great pleasure".[1]

## Pronunciation

The K. pronunciation strikes one accustomed to P. as somewhat harsh. This is due to a more open than in P. pronunciation of the different shades of the phoneme *a*. In P. the shading of that vowel depends on the quality of the consonants entering into the same syllable and is sometimes regulated

---

[1] I find one instance of such confusion in 'Abdul-Karim's History of Central Asia edited by Ch. Schefer with a French translation (Histoire de l' Asie Centrale etc. par Mir Abdoul Kerim Boukhary, publiée-traduite et annotée par Charles Schefer. Paris. Ernest Leroux, 1876) text p. 58 l. 18-19: خود را بحوالی مرو رسانید بچهار هزار سوار درجای عمیق پنهان شدند. Schefer's translation (p. 133) does not convey any adequate idea of the construction of the Persian text of this passage.

(towards a certain softening rather than otherwise) even by the quality of a preceding syllable, showing a kind of synharmonizing tendency. As a rule, the short *a* in P. might be considered as a sound very near the *a*-sound in the E. word "b a d", or the F. *è*. When, however, that vowel is combined in a syllable with one of the nine hard cosonants ح خ ص ض ط ظ ع غ ق, it sounds like the open *a* in F.: حرب *ḥarb*; خر *xar*; صبر *ṣabr*; ضرب *ẓarb*; طرف *taraf*; ظرف *ẓarf*; عرب *'arab*; غریب *γarīb*; فرق *farq* Normally it is one degree softer. The presence of the *consonant* ی in a syllable softens the phoneme *a* one degree more, bringing it thus down to a sound very much akin to the F. *é* (é f e r m é): می *méy*; یک *yék*, unless its action is counterbalanced by the presence of one of the above enumerated hard consonants, which have always the upperhand in such cases. Thus:

حیّ *ḥayy* n o t *ḥéyy*; یخ *yax* not *yéx*; and so forth

Last but not least, the final *a* (expressed through a mute *hā-yi havvaz*), besides having a sound the quality of which is regulated by the above rules is also influenced in P. by the quality of the preceding syllable which, if soft, tends to soften the final syllable as well. Thus: میوه *mīvé*; سینه *sīné*, etc. Generally speaking, however, that final *a*-sound never becomes more open than the *a* in E. "b a d".

We have thus in P. three more or less distinct shadings of the phoneme *a* (short): $a_1$ (open *a* like the *a* in F.), $a_2$ (like *a* in E. "b a d") and $a_3$ (like the F. *é*) for initial and medial syllables. and $a_2$—$a_3$ for the final syllable in a word.—

K., however, does not possess $a_3$ at all, the place of which in initial and medial syllables is taken by $a_2$ and in the final syllable by a shading of *a* altogether foreign to P.[1] which we shall call here, for clearness' sake, $a_0$ meaning by it that the quality of it is one degree more open, than $a_1$. That sound is so near the sound of the long *ā*, that it is sometimes difficult to decide, whether the word ought to be written with an *alif* (ا ..) or a *hā-yi havvaz* (ه ...) at the end. That state of things is best illustrated by the different spellings of the same words as recorded above in our §§ 5 and 6 in the chapter on "s p e l l i n g". Thus:

K. *mēwa* ( میوه ) = P. میوه (*mīvé*).

K. *tawba* ( توبه ) = P. توبه (*tawbé*), and so forth.

---

[1] I am inclined to think that different currents must have been at play to develop this sound in K., in the first instance probably the influence of T on a soil already prepared by the existence of a similar *a* sound in Pšt., and the final consolidation of that sound might have been due to the influence of H. and partly to an absence of any direct influence on the part of P.

The long ā in K. is the same as in P. That is to say, it is an open ā pronounced with the lips held in the shape necessary for pronouncing o. That sound, however, has in individual cases in K. the same tendency as in Western Persia towards becoming a long ō, without, however, ever lapsing altogether into that sound.[1]

A sound peculiar to K. is the *yā-yi majhūl* non-existent in P.[2] It is a sound very near the F. é fermé (é accent aigu) and is generally expressed in transcription by ē. Sundry A. words containing the diphthong *ay* are also sometimes pronounced in K. with an ē sound. I am able to quote only one example of this viz. *xēl* ( A. خيل ) q. v., but there are certainly a few more such words in K.[3]

On the other hand, the *yā-yi majhūl* in words of purely Iranian origin seems to begin to be partly discarded (probably under the ever-increasing influence of P.) or to get resolved into the congenerous diphthong Thus along with *šēr* for "tiger" one often hears *šīr* (more particularly in names, like *Šīr-Ahmad*, etc.), while such words, as *umayd* "hope", *sufayd* "white", *mayz* "table" may be mentioned in illustration of the disintegration of the ē. Furthermore, many words, like the just quoted *šēr—šīr*, are currently heard with either ē or ī: thus, for instance the verbal particle *mī-* is as often pronounced with its contemporary Persian sound, as with the *yā-yi majhūl*; so also the privative preposition is heard either as *bi-* or *bē-*. Above and besides, the actual number of words pronounced with a *yā-yi majhūl* seems to be in K. far below the number of such words as recorded in dictionaries. I therefore cannot wholly subscribe to the opinion emitted by Morgenstierne[4] that "the old majhūl vowels are preserved, ē always, even so far west as in Herat". As regards his opinion about the *vāv-i majhūl* which, according to him[5], is preserved as "ō generally, but with some variations according to the locality", I can only say that I have never been able to notice that sound in Kabul, but am compelled to admit its existence in Afghanistan having heard that sound in the speech of men hailing from Ghaznī and elsewhere.

To sum up, we have in K the following vowels:

*ā*, $a_0$, $a_1$, $a_2$; *ē*; *ī*, *i*; *ū*, *u*.

---

1 That as against Ivanow, Rustic Poetry in the Dialect of Khorasan, JASB, 1926, pp. 244.

2 See for it, for instance, Horn, Neupersische Schriftsprache (Grundriss d. Iran. Philologie I B.) pp. 32–33, 35.—see also my translation of Noeldeke's Iranian National Epic, Journ. of the K.R. Cama Oriental Institute, No. 6, Bombay 1925, pp. 156–157, and more especially note 1 on the latter page.

3 Cf. Horn, op. laud. p. 33.

4 Report on a Linguistic Mission to Afghanistan, p. 7.

5 *Ibid.*

Contrary to P., where the *izāfa* is always an *e*-(or *ye*-after vowels)-sound, very near to the above-described sound of the *yā-yi majhūl*, the *izāfa* in K. sounds as a definite sharp *ī*. It might be added here by way of parenthesis that the only two other instances of the occurrence of such a sound in P. known to me are the affirmative adverbs *balé* and the somewhat obsolete *ārē* ( آری ) "yes", a word which I have not met with in K.

As regards the consonants, they are the same as in P., that is: *b*, *p*, *t*, *th* (=*s*), *j*, *č*, *ḥ* (=*h*), *x*, *d*, *ḏ* (=*z*), *r*, *z*, *ž*, *s*, *š*, *ṣ* (=*s*), *ḍ* (=*z*), *ṭ* (=*t*), *ẓ* (=*z*), ʿ *γ*, *f*, *q*, *k*, *g*, *l*, *m*, *n*, *w*, *h*, *y*.

There is little, that calls for notice in the pronunciation of these consonants, except certain peculiarities connected with the *h*-sound, and the fact that, contrary to P., *γ* ( غ ) and q ( ق ) are two different sounds.

The *vāv* ( و ), which in P. has the pure sound of the English *v*, has in K. rather a tendency towards *w* after and between vowels[1].

The aspirates (*h*, *ḥ*) have a tendency to be dropped at the beginning of the word and to fall out when occurring in the middle of a word.

The dropping of the initial aspirate does not produce any further results except perhaps that, in the case of the Present tense forms of the verb *būdan*, that disappearance of the initial *hā-yi havvaz* is reflected even in the spelling of these forms which we encounter in print and in writing not only as است (inst. of هست ), where it is not always easy to say whether the form of the v e r b u m s u b s t a n t i v u m is not meant, but also as استند (A A. inst of هستند). It is most probable that the remaining forms of that verb (i.e., هستيد - هستيم - هستي - هستم) would also be spelt in the same way, but I have not come across any of them either in print or writing, as the occasions on which these forms might be used are comparatively rare. Further examples of the dropping in speech though not in writing both of the initial *hā-yi havvaz* and of the *ḥā-yi ḥuttī* will be found in the vocabulary.

In the middle of a word, however, a vowelless *h*-sound is not only apt to fall out, but its disappearance produces, as would be expected, a compensatory lengthening of the preceding vowel, so that *a* becomes *ā*, *i* becomes *ī* and *u* becomes *ū*. Neither the disappearance of the *h*-sound, nor the lengthening of the vowel are, however, in any way expressed in writing.[2] Thus :—

---

[1] Cf. also L o r i m e r, Notes on the Gabri Dialect of Modern Persian, JRAS, 1916, p. 432.

[2] Cf. for it also I v a n o w, Rustic Poetry in the Dialect of Khorasan JASB, 1926, p. 243 below.

شهر (P. *šahr*) "city" is pronounced *šār*.[1]

مهر (P. *mihr*) "love" „ *mēr*.

مهر (P. *muhr*) "seal" „ *mūr*.

The same rule is to a certain extent and with slight variations still applicable in the case of the *h*-sound beginning a syllable in the middle of the word, that is when it is provided with a vowel. When the vowel in the preceding syllable is the same short vowel as the one connected with the *h*, the latter falls out and the two short vowels melt together into one long:—

دهان (P. *dähän*) "mouth" is pronounced *dān*.

سحر (P. *sahar*) "down „ „ *sār*.

When, however, the vowels in the two adjoining syllables happen to be of different quantity or quality (or both together), the *h* falls out and the vowel of the p r e c e d i n g syllable is lengthened:—

مهين (P. *mihīn*) "greatest", etc., is pronunced *mē'īn*.

A diphthong may be reduced in such a case to a mere long vowel:—

شوهر (P. *šawhar*) "husband" is pronounced *šūar*.

جوهر (P. *jawhar*) "essence" „ „ *jūar*.

The final sonant aspirate after *a* falls off producing thereby a compensatory lengthening of the preceding vowel:—

ده (P. *dah*) "ten" is pronounced *dā*.

A final *h*-sound preceded by an *i* turns the latter by falling off into an *a*:—

گره (P. *girih*) "knot" etc. is pronounced *gira*.

مصالح (P. *maṣalih*) "materials" is pronounced *masāla*.

I do not feel in a position to say whether the above rule could be considered as extending to the *h* in the case of a preceding *u*. First of all, words containing that combination are very few, and of the two I can think of, I have heard the one pronounced in both ways, that is:—

---

[1] R i e u (Catalogue of the Persian Mss. in the British Museum, vol II, 1881, p 728*a*, in a most valuable excursus on the Gūrān dialect (see for it H o u t u m - S c h i n d l e r, Beiträge zum kurdischen Wortschatze, ZDMG., XXXVIII, 1884, p 44 under G.) registers the same phenomenon of the disappearance of the aspirate with an ensuing compensatory lengthening, which however, contrary to K. is expressed in writing.—G e i g e r (Grdr. d. Iranischen Philol., I, p. 387) records summarily that peculiarity as a feature common to the Central Iranian dialects.—This peculiarity seems to be, in a greater or lesser degree, common to all Iranian dialects, as also to the vulgar speech in Persian itself.

نه (P. *nuh*) "nine" pronounced either *nū*, or as in P. *nuh* whereas the other word گه is most decidedly pronounced with the preservation of the aspirate, that is, like in P., *guh*. The fact that the latter word can be heard almost exclusively in the speech of the lower (i e., illiterate) classes of the population makes it highly improbable that it could have been in any way affected by the "literary" language in the matter of pronunciation.

Another and quite peculiar kind of influence seems to be exercised in certain words by the falling out of the *h*-sound, namely not only on the preceding vowels, but also on the adjoining dentals, which become thereby unvoiced. Thus:—

شهد (P. obs. *šahd*) "honey" is pronounced *šūt*.

عهد (P. *'ahd*) "agreement" ,, ,, *āt*.

میدهم (P. *mīdeham*) "I give" is ,, *mītam* [1].

As regards the forms of the latter verb such an unvoicing of the dental is also encountered in vulgar speech in P., [2] where the voiced dental stop has a tendency to resolve itself under the influence of the disappearing *h* into a dull sound in other isolated words as well, as, for instance, *Meytī* in vulg P. instead of مهدی *Mahdī*, pr. n.

As regards other consonants, the deviations displayed in them as compared with P. are of lesser importance being more or less common to most of the Iranian dialects, and partly also met with in the ordinary P. speech of the illiterate. Those deviations are as follows:—

The vowelless *b* at the end of a syllable after *a* or *ā* becomes *w*, forming thus with the preceding vowel a diphthong *aw* or *āw*.—

شب (P. *shab*) "night" is pronounced *shaw*.

آب (P. *āb*) "water" ,, ,, *āw* [3].

This change is never recorded in spelling and the words undergoing it are spelt in the ordinary way as in P.

The closing *d* of a syllable containing a long vowel in the 3rd pers. sing. Past Tense of certain verbs tends to become in pronunciation *t*, that is to say, becomes unvoiced. Thus:—

---

1 Cf. for this also Morgenstierne, Report on a Linguistic Mission to Afghanistan, p. 8.

2 Not only "in other Eastern Pers dialects and in the Kashan dialects", as Morgenstierne, loc. cit.

3 Cf. for this also the most valuable, but unfortunately extremely brief, hints regarding the Dēhwārī dialect in Mr. Denys Bray's Report on the Census of Baluchistan for 1911 quoted in LSI., vol. X, p. 452.

ابستاد (P. *istād*) is pronounced *ēstāt*.

بود (P. *būd*) ,, ,, *būt*.

This peculiarity is no more recorded in spelling than is the above case of the voiced labial becoming a semi-vowel, but nevertheless it seems to point to the old pronunciation of the final dental as expressed in writing in older P. works and in Pahlavi,—in the former by means of the A. letter ذ showing that it must have been sounded at a certain period as a voiced dental spirant, the latter through a mere *t* (whatever its exact pronunciation may have been at different epochs).[1]

This peculiarity naturally disappears whenever the fuller forms of the verb are concerned, the voiced dental being again reinstated :—

استاده is pronounced *ēstāda*.

بوده ,, ,, *būda*.

The final *d* of the 2nd pers. Plur., both in the Pres. and in the Past Tense, is pronounced as *n* :

میروید (P. *mīravīd*) is pronounced *mērawīn*.

رفتید (P. *raftīd*) ,, ,, *raftīn*.

This peculiarity is, however, also extremely common in vulgar speech in P.

The sound *f* seems to be felt as foreign to the language and, although it is certainly used and pronounced as such by the literate, the common people are mostly simply unable to pronounce that sound, which becomes in their speech *p* when beginning a syllable, *w* when vowelless (that is closing a syllable). Thus :—

فرهاد (P. pr. n. *Farhād*) is pronounced *Parhāt*.

افغان (P. *Afghān*) ,, ,, *Awghān*.

That particularity is common to Tājikī as well, and seems to be very old, to judge by the fact that in Pahlavi there is one sign only to express both *f* and *p*.

In several words we find, as against P., a kind of incre-

---

[1] We find, however, instances in the older literary language of the final dental in the 2nd pers. Plur. of verbs being expressed by a ث The *Nawal Kishore* edition (Lucknow, 1887) of the Dīvān of Shams-i Tabrīzī has, for instance, preserved certain such forms, e.g., on p. 202 l.9. we read: مارا چو نمودیث بر دوست بجوئیث . I am inclined to think that such spellings, essentially phonetic, as also certain other peculiarities in the language of Jālalu-d-Dīn, must be attributed to the Eastern-Iranian origin of the poet. That is to say, that they are *Tājikī* in the wider sense of the word, *not* P.—

mental -*n* added to the final vowel of the word without any apparent reason. Those words are:

*galūn, sūn, qālīn* and *yakhan* (v. Vocabulary).[1]

The first of these words has not been met with in writing, but is very current in K. speech[2]. No such final-*n* can be traced, however, either in the older forms of that word (Aw. *garah-*[3], *garemōhva-*[4]; Phl. *garōk, galōk*[5]), nor in modern Iranian dialects (Pšt. *gharra'h,*[6]; Kd. *gerū*[7]; Central dialects *gulī*[8]).

*sūn* (سون) along with the usual *sū* (سو) "side":—

*ī sūn biyā* "come here!"

*ū sūn biraw* "go there!"

has also an incremental -*n*, the presence of which is not warranted, as far as I can see either by the Pahl. form of the word (*sōk*), nor by any dialectical word of the kind.[9]

The two other words are T. loan-words in P., where they occur as *qālī* or *ghālī* and *yakha* respectively.

The -*n* in the first of them (although never occurring in P) seems to be originally T, as the dictionaries give both forms of the word, but ascribe to them slightly different meanings, *qālī* being explained as "a costly kind of carpet"[10] or "grand tapis velu et de qualité supérieure"[11] and *qālīn* as "a costly carpet"; according to others, "a small carpet or rug"[10] or "petit tapis".[12] No such distinction naturally exists in P., where the second, increased form does not exist at all, nor is such distinction traceable in K. where only that second form of the word is used. I have heard the Turkomans of the Caspian shores call "a carpet" *kolyn* or *kolun*, which is obviously the T. pronunciation of our K. (from Tājīkī?) word.

The last word *yakhan*, as already mentioned, is also of T. origin, being originally in T. *yaqa* (spelt more commonly[12] یقا,

---

[1] I find a further similar instance in the case of the word پهلو (*pahlū*) "side" in W. Ivanow's Persian as spoken in Birjand, JASB, XXIV, 1928, which occurs with such an incremental-*n* in No. 38 p. 283 and in No. 87 p. 295.

[2] Cf., however, Lorimer, Phonology, pp. 178*a* and 193*a*.

[3] v. Horn, Neupersische Schriftsprache (Grd.) p 55.

[4] Salemann, Mittelpersisch (Grd.) p. 279.

[5] *Ibid.*

[6] Raverty, s.v.

[7] Socin, Die Sprache der Kurden (Grd.) p. 257 § 21.

[8] Geiger, Centrale Dialekte (Grd.) p. 383 § 160.

[9] Steingass, s.v gives *sūn* "a part, a side," without any further explanation.

[10] Steingass, s.v.

[11] Kieffer et Bianchi, Dictionnaire Turc-Français, s.v., who, however, give both the words with the mention, "s.p." (i.e. "substantif persan").

[12] Kieffer et Bianchi, s.v.

but also طقه ).[1] In P. words of T. origin the *q* and *kh* are mostly interchangeable, hence P. *yakha*,[2] in which some popular etymology connecting it with *yakh* "ice" (in the sense of "frozen" *i. e* "stiff") might be also reflected.

Parallel forms of this kind are not unknown in literary P. we have for instance *zamī* and *zamīn* for "earth", but there the -*n* is fully justified, as part of the original suffix with which the word has been formed, the shorter form being without any doubt of a later formation.[3] The same relation exists also between the two P. words for "golden", where again an old adjectival suffix is accounting for the -*n* in *zarrīn*, whereas the Adjective *zarī* is, so to say, a secondary formation from the noun itself with a Modern Persian suffix -ī (*yā-yi nisbat*).

We may, therefore, maintain that the -*n*, at least in K. *galūn*, *sūn* and *yakhan* is incremental and might have its origin in some analogy with other words ending in -*ūn* and -*an*. As regards *qālīn*, the -*n* is probably originally T, but that fuller form has somehow been adopted in K. (probably through the channel of Tājikī) and has not found access into P. This latter consideration makes one think that the fuller forms *galūn*, *sūn*, and *yakhan* in K. may have received that incremental -*n* under the influence of T. (and probably also through the medium of Tājikī).

## The Kābulī pronunciation of Arabic words

The pronunciation of A. loan-words (if we may call thus that essential and integral part of the Persian language) is regulated in P. by certain firmly established, albeit unwritten rules. All these rules chiefly tend to one and the same goal —the strict preservation of at least the outward shape of the A. words adopted in P., so that the structure of the A word should be damaged as little as possible. The final short vowels of the A. terminations, as entirely foreign to the P. language, are dropped including the *tanwīn's*. Of the latter, however, the Acc.-termination -*an* when used adverbially, is often preserved in P. pronunciation, although in most cases the A. final *mute alif* after that termination is sounded, whereas the termination itself disappears.[4] The A. consonants and vowels are naturally pronounced according to the general rules of P. pronunciation, but their order is practically never disturbed, the vocalisation of the consonants remaining strictly the same as in the

---

[1] *Ibid.*

[2] Steingass, however, does not give it at all, but gives instead طقه *yaqqa* "the collar of a garment; the seizure of anyone by the collar."

[3] Cf. Horn, op. laud. § 23, p. 58, note 1.

[4] With regard to the use of A. accusative-forms of adverbs in P. and K. see below, pp. 37-38.

original A. The instances where A. words have undergone in P. some slight alterations with reference to the vocalisation are very few. Two or three of the most current of such words may be cited here: A لَكْد (*lakd*ᵘⁿ) "a blow, a cuff, a kick"—in P. *lakad*, with an unwarranted vocalisation of the medial consonant. This alteration, however, is not felt as such and the word in its altered form is used in P. exclusively.

A. عِمامَة (*'imāmat*ᵘⁿ) is generally pronounced in P. *'ammāma*, but such pronunciation of that word, though almost universal, is considered in P. as vulgar and as incorrect.

كَفْن و دَفْن "funeral" (lit. "wrapping in the shroud and burying"), is mostly pronounced in P. *kafan-u-dafan* even by the literate, owing to the natural confusion of the rare word *kafn* (an abstract noun) with the very current and common *kafan* (applied in P. not only to the wrappings of the corpse, but also to a kind of shirt-like white garment worn in ordinary life by dervishes, or donned by flagellants[1] on the 10th of Muḥarram, etc.). The undue vocalisation of the second word is the result of a natural impulse towards alliteration or synharmonization of two closely connected words.

A. عَلَى حِدَة (*'alā ḥidat*ᵘⁿ) is currently pronounced in P. *alāḥidda*[2], with an undue reduplication of the final consonant. This pronunciation of the A. expression is also felt to be erroneous and is, in consequence, avoided by the literate classes of the population.

To sum up, the A. words in P. are, mutatis mutandis, preserved in their original shape. Neither a vowel, nor a consonant can disappear in the P. pronunciation of an A word. Neither a vowel, nor a consonant can be arbitrarily added in an A. word in P, in other words, a *sukūn* cannot be supplanted by an unjustified vowel or vice-versâ, nor can a consonant be reduplicated at will, where no such reduplication exists in the original A. word, nor can a reduplicated consonant of an A. word be arbitrarily reduced to a simple consonant, except at the end of a word.—

These rules seem to be inexistent in K.

The most blatant example of the violation of these rules is the current introduction of an unnecessary vowel in A. words in the place of a *sukūn* for the medial consonant. A superfluous syllable is thereby created and A. monosyllabic words

---

[1] See for this my "Muharram in Persia", Visva-Bharati Quarterly, July 1923, p. 126.

[2] Written in one word : عليحدّه.

become thus converted into disyllabic words. The accent of the word remains in that case nevertheless in its original position, that is on the first syllable. One or two examples will suffice, as a few more of such cases are also recorded in the annexed Vocabulary:

A. شمع (P. *sham'*) is pronounced *shá-mā*.

A. قتل (P. *qatl*) „ „ *qá-tal*.

This intercalated vowel disappears whenever the word so modified receives in its normal course an additional vowel at the end, (i.e., when it is followed by an *izāfa*, a *yā-yi vahdat*,—*ishārat*,—*nisbat*, a vowel-conjunction [1]) or any word beginning with a vowel. For instance:

قتل عام will be pronounced as in P.: *qatl-i-'āmm* "universal massacre".

بمن دخلي ندارد will be pronounced—*ba-ma dakhlī nadārad* "it does not concern me".

علم و جهل will be pronounced—*ilm-u-jihil* "learning and ignorance" (v. Vocabulary under the second word).

A *tashdīd* or a vowel in A. words can disappear or be dropped in K. pronunciation. A most current K. word. in which both these irregularities occur at the same time, is the A. اطّلاع (P. *ittilā'*), which is pronounced in K. *itlā*, the correct pronunciation of the word being altogether unknown in K.

As already hinted at above in the paragraph on the disappearance of the *h*-sound, the purely A. *hā-yi hutti* ( ح ) is treated exactly in the same way as the *hā-yi havvaz* (whether in P. or A. words), which would have been inadmissible in P. That, however. is the case not only in K., but also in G ū r ā n [2]

[1] That is the و whenever it is pronounced *ū*. The conjunction in P. has, in fact, according to circumstances, three different pronunciations. (1) *va* between two sentences, or two words when it plays the rôle of a disjunctive, rather than conjunctive particle; (2) *ū* between two words which form together one logical complex, that is, are synonyms, or antonyms, or generally go in couples, when the first of them ends in a consonant; (3) *vū* when the first of the two words of such a complex ends in *ā* or *a*. When the first of two such words ends in *ī*, the *ū* of the conjunction receives a supplementary connecting *y*-sound and becomes *-yū*. In P poetry only (2) and (3) are used. I maintain that the latter two are altogether different in origin from (1), which is the A. conjunction *wa* adopted in P., whereas (2) and (3) represent the old Iranian conjunction: AP. *uta*, P h l. *u*. All this only by the way.

[2] Cf. for this the most concise and valuable excursus by R i e u, in his Catalogue of the Persian Manuscripts in the British Museum, vol. II p 728 b-729 (G ū r ā n d i a l e c t).

and Tājikī[1], which latter is probably chiefly responsible for all these aberrations with regard to A. in K

The *l* of the A. article *al-* is often left unassimilated before solar letters in K. pronunciation This is apt to occur before *s* and *n*, certainly never before *r* and hardly ever before the other solar letters. Examples, however, of such pronunciation as *Abdul-Samad* (inst. of '*Abdussamad* عبد الصمد ) and *Abdul-Nabī* (inst. of '*Abdunnabī*—عبد النبي ) can be currently heard in K. speech, and not only from the illiterate.

One more peculiarity in K speech as opposed to P., is the preferential pronunciation and spelling of the A. feminine termination —*atun* ( ةٌ ) as *-a*, whereas the more generally adopted pronunciation and spelling for such words in P. is *-at* Thus:

K. *tarbiya* ( تربیه ) = P. *tarbiyyat* ' education "

K. *alāma* ( علامه ) = P *'alāmat* " sign, mark ".

The exceptions to this rule are somewhat striking as they concern often words that are, by exception, pronounced in P. with *-a* instead of *-at*: For instance:

K. *mudākhalat* ( مداخلت ) = P. مداخله " concerning oneself with something, meddling ".—

*ijāzat* ( اجازت ) = P اجازه " permission ".

A great number of words of this kind coincide, however, in pronunciation, as far as the termination is concerned, with the forms current in P , as *barakat*, *tijārat*, *dawlat*, *zīnat*, *sifārat*, *širkat*, *vizārat*, etc. etc.

## Etymological and Syntactical

### The Noun

The peculiarities with regard to nouns in K. chiefly concern the formation of the plural, where the termination ها - (*-hā*) seems to be used for preference, even in cases when P. has *-ān* ( ان - ). For instance صاحب منصب های عسکری (A A., M A.) = P صاحب منصبان نظامی " military officers ".

Furthermore, the A. feminine plural-termination *-āt* ( ات - ) is freely used for Persian words, as, for instance:

*pēsh-āmadāt* (OL. پیش آمدات)=P. *pīsh-āmadhā* (پیش آمدها) "happenings".

*kārāt* ( کارات ) = P. کارها " doings; works ", v. Vocabulary.

[1] Cf. Teufel, Quellenstudien zur neueren Geschichte der Chânâte, ZDMG., XXXVIII, 1884.

*rasīdāt* (رسیدات) = P. رسید - رسیدها "receipts", v. Vocabulary [1]

This combination is not altogether foreign to P., where the termination *-āt* for the plural in certain definite words has been firmly established to the exclusion (in most of the cases) of the usual plural formation in *-hā* or *-ān*. The more current and common instances of such words in P. are:

باغات (but also باغها) "gardens"

دهات "villages"

نوازشات "caresses"

میوه جات [2] "fruits"

قلعه جات "fortresses"

سبزه جات "vegetables"

نوشته جات "writings, letters"

روز نامه جات "newspapers"

Altogether foreign to P. is the K. treatment of A broken plurals as ordinary Persian singulars, that is the appending to them the usual Persian plural-terminations *-ān* and *-hā*:

K.—*AA.* تجاران (*tujjārān*) = P. تجّار or تاجرها "merchants".

K.—AA. اولادها (*awlād*[*h*]*ā*) } = P. اولاد "children":
AA. اولادان (*awlādān*) }

(*awlādhā-yi azīzum* "my dear children" was the usual form in which the Amīr addressed the people in his speeches).

[1] Such formations are current in Tājīkī, cf Teufel, Quellenstudien zur neueren Geschichte der Chânate, ZDMG, XXXVIII, 1884, p. 246, and more especially the long footnote on the same page; also Geiger, Bemerkungen über das Tädschikī (Grdr., I, p. 408).—In Abdul-Karīm Bukhārī's Text (Histoire de l'Asie Centrale par Mir Abdul Kerim Boukhary, publiée, traduite et annoteé par Charles Schefer, Paris, 1876) I can record (besides words like باغات دهات common to P. as well, see below) only one instance of such plural formation which occurs twice طویخانه جات p 48 l. 19 and p. 52 l. 6. It is interesting to see that not a single case of such plural-formations occurs in the old Ṭabaqāt of Anṣārī described by Ivanow in his valuable monograph already mentioned (op. laud. pp. 28–29)

[2] These first five words are recorded in Salemann and Shukovsky's Neupersische Grammatik, Porta Linguarum Orientalium, Berlin 1889, §12, note 1. The last two of them are given in the form میوجات and قلعجات, with the explanation that "the mute ة is converted in the Arabic style into ج" That, however, is not the case, the *j*-sound here being the result of the re-assertion, before a vowel, of the old guttural Phl. termination *-k*, which first becomes voiced between two vowels and is further softened into a palatal: k > g > j. The mute ة is mostly preserved in writing in such instances in K.: نوشته جات.. not نوشتجات etc.

Instances of such double plurals are very numerous, but do not exclude the correct use of A broken plurals in isolated instances This, however, may be due to quite recent influences on the part of P and probably also to an earlier influence exercised by literary Persian, as in Tājikī such A. plurals are throughout and exclusively handled as Persian singulars. [1]—

Of a quite recent origin probably are the hybrid formations for different nomina agentis, like

*barqīwālā* ( برقي والا ) "electrician"

*čūbwālā* ( چوب والا ) "woodseller"

*xarwālā* ( خر والا ) "donkey-driver", etc., in which the H. suffix *-wālā* takes the place of some corresponding P. suffix.[2]

Abstract nouns by means of a *yā-yi masdar* are currently formed in K. from the Past Participle, a formation which is altogether foreign to P. These abstract nouns denote by their very nature (as originating from the Past or, we may say, Passive or Pefect-Participle) a passive or past state and seem to stand for a Passive Infinitive[3]. Syntactically, however, such forms in K. serve mostly to express adjectives (*izāfa* + abstract noun). Examples of such expressions are given in the Vocabulary, but we may as well repeat one of them here to emphasize the point: OL. یاد داشت فرستادهگي خود. "The note sent by yourself" (lit. "of your own sending").

Unclear to me is an incremental final *-a* which obviously appears both in nouns and adjectives merely at the whim of the speaker (or the writer, as the case may be), as for instance:

*tana* ( تنه ) along with *tan* ( تن ) "body":

AA.... اگر تنه را کج نکند "if he does not bend [his] body.."

*qarza* ( قرضه ) along with *qarz* ( قرض ) "debt; loan":

[1] Cf. Teufel op. laud 246-7; we find in ʿAbdul-Karīm's text: اشیاها "things" p. 102 l. 9; اعیانان "grandees" p. 56 l. 17 ( جملهٔ اعیانان بیعت نمودند ); اعمالها "actions" p. 54 l. 16; تجّاران p. 100 l. 13; p. 102 l. 5; p. 103 l. 18; on p. 103 ll. 15,16 we find تجّار in the sense of a singular, but also تاجر p. 104 l. 6: تاجري ده بار مقام دارد p. 104 l. 10: تواریخها — میگیرد از اجر; p. 105 l. 21 تاجر مالهارا گذاشته ... میآید p. 108 l. 3; رجالان p. 85 l. 2: از رجالان ابلتوز ر خان.

[2] Cf. also Morgenstierne, Report p. 9.

[3] Cf. also Ivanow, Tabaqat, p. 340 and idem, Rustic Poetry in the Dialect of Khorasan, JASB, XXI, 1925 p. 251, who somewhat loosely mentions such formations as being compounded with "the suffix *agi*", but considers them quite correctly to be "a sort of substitute for the infinitive", in the first of these two papers, and as having "rather a passive meaning", in the second monograph of his.

AA. انگلیس به لهستان قرضه میدهد "England gives a loan to Poland"[1].

*dāra* ( داره ) along with *dār* ( دار ) "gibbet"

*muta'ayyana* متعینه instead of the P. متعین "appointed":

-OL. وزیر مختار متعینهٔ ژاپون "appointed Minister Plenipotentiary to Japan".[2]

## Adjectives

There is very little to be noted in the case of adjectives, beyond two or three unusual comparative degree formations, like:

*bisyārtar* ( بسیار تر )[3] = P. بیشتر "more"

*bētartar* ( بهترتر ) = P. بهتر "better"[4].

Sometimes the comparative degree of an adjective is expressed by placing the word *ziyādatar* ( زیاده تر —in itself uncommon in P.) "more" before the positive degree of the adjective:

MA. زیاده تر ارزان (*ziyādatar arzān*)=P ارزان تر "cheaper".

Certain adjectives implying in themselves a difference of size, quantity (not uncommon in P. as well) or quality are used simply in the positive degree in conjunction with or to indicate comparison. For instance:

*az ma kalān* ( از من کلان )=P. از من بزرگتر "bigger than I".[5]

*az ū pur-zūr* ( از او پر زور )=P. از او پر زور تر "stronger than he".

Certain adjectives formed by means of a *yā-yi nisbat* from nouns ending in *-ā* intercalate instead of the usual connecting *-y-* ( ی ), a *-w-* ( و ):

*itālāwī* ( ایطالاوی )[6]=P. ایطالیائی "Italian"

*kīmiyāwī* ( کیمیاوی )=P. کیمیائی "chemical".

---

[1] In this case the *-a* is, however, probably merely the A. *waḥdat*-termination *at*, but the word is uncommon in P., where either simple قرض or استقراض would be used in that meaning.

[2] The form is a puzzle, which is still more increased by Steingass who gives s. v. "*mata'ayyana* (sic! with an *a* after the *m*!) A station, post, command; an appointment; establishment".

[3] I find only one instance of that form in 'Abdul Karīm p. 94 l. 1.

[4] Salemann and Shukovsky, Neupersche Grammatik, register, in §22 note, a case of the comparative degree بترتر in the Shāhnāma.

[5] Cf. Morgenstierne, Report, p. 8.—'Abdul-Karīm has also از همه بزرگست text, p. 67 l. 14 (Schefer, Traduction, p. 153 l. 9–10; "[Mehommed Houssein Khan Tourèh] est l'aîné des fils [d'Emir Hayder]".

[6] Normally one would besides have expected *itāliyāwī*.

It is possible that these formations are based on the analogy with A. *nisba's* from nouns in *-ā*, like دنيا - دنيوى ; رضا - رضوى where, however, the long *ā* merely becomes resolved into a short *a* + *v*

The suffix *-wār* ( -وار ) obsolete in P. is of current use in K and is easily tacked on to any suitable noun or adjective, but mostly in conjunction with an additional suffix -ī (*yā-yi nisbat*), which latter seems in that case to impart an adverbial meaning to the compound. Thus:

*nāxušwārī* ( نا خوشوارى ) "as if ill";

*mastwārī* ( مستوارى ) "as if drunk; like one drunk";

*zanwārī* ( زن وارى ) "like a woman";

*xānawārī*[1] ( خانه وارى ) "similar to a room";

*rasmīwārī* ( رسمى وارى ) "semi-officially";[2]

The adjective is very often placed in K., as against P., b e f o r e the noun to which it belongs, e. g.:

AA. سابق مدير يحيى خان = P. يحيى خان رئيس سابق "Yahya-khan, the former director" (v. Vocabulary s. v. *mudīr*);

*yak sust ādam* ( يک سست آدم ) = P. آدم سست "a weak man";

*yak sangīn ādam* ( يک سنگين آدم ) = P. شخص با وقار "a dignified man";

*yak xurd bača* ( يک خرد بچه ) = P. طفل كوچک "a small child";

*latīf ādam as* ( لطيف آدم است ) = P. مرد لطيف است "he is a pleasant man";

*zakī ādam as* ( زكى آدم است ) = P مرد صالح است or آدم "he is a virtuous man";

MA. ( بزرگ يک خدمت ) = P. يک خدمت بزرگ "a great service".

Such transposition of the adjective is not altogether foreign to P., but occurs rather seldom and only in cases where greater stress has to be laid on the quality implied by the adjective. A *yā-yi vahdat* (and n o t the numeral يک ) is then necessarily used, e. g., آدم خوب است "he is a good man," but خوب آدمى است "he is a (very *or* really) good man".

[1] Not to be confused with خانه وار or خانوار "family; house".

[2] For examples of words formed with the suffix *-wār*, v., for instance, H o r n, Neupersische Sprache (Grdr. d. iran Phil. I) p. 191.

## Numerals

Some of the numerals in K. differ in pronunciation from P. These are:

| | | |
|---|---|---|
| *šaš* ( شش ) | instead of P. | *šiš* "six" |
| *apt, aft* ( هفت ) | ,, ,, | *haft* "seven" |
| *ašt* ( هشت ) | ,, ,, | *häšt* "eight"[1] |
| *dā* ( ده ) | ,, ,, | *dah* "ten" |
| *pinjāh* ( پنجاه ) | ,, ,, | *panjāh* "fifty" |
| *azār* ( هزار ) | ,, ,, | *hazār* "thousand". |

Three numerals differ from P. altogether in their formation (and spelling):

*du sad* ( دو صد )[2] = P. دویست "two hundred"
*sē*[3] *sad* ( سه صد ) = P. سیصد (*sīsad*) "three hundred"[4]
*panj sad* ( پنج صد ) = P. پانصد "five hundred"[5].

A plural formation *sadhā* ( صدها ) "hundreds" uncommon in P. is frequently to be met with in K ·

AA. صدها قسم اختلافات = P. صد قسم اختلاف "hundred kinds of disagreements".

The conjunction -*u*-( و ) between the figure of the tens and the figure of the units is mostly omitted in writing in K. Thus: سی پنج is not "thirty times five", but "thirty five"[6].

This omission of the conjunction in the middle of a numeral containing a fractional is even more equivocal ·

---

[1] And the compound numerals of the two latter, —*apdā, aždā* (هژده - هفده).

[2] In Tājīkī that would seem to be the current form: ʿAbdul-Karīm has it throughout his text, namely: p. 2 l. 1; p 5 l. 14; p. 3 l. 6; p. 30 l. 8; p. 38 l. 23; p 77 ll. 21, 22; p 106 l 17; Muḥammad Amīn has it once in the passages quoted by Teufel, o. c. p. 339 l. 3. (note) دویست, but his language seems generally to be influenced by literary Persian to a far greater extent then that of ʿA.-K.

[3] The *ē* sound here is probably produced by the presence of the final mute *h*.

[4] ʿAbdul-Karīm has thoughout سه صد p. 43 l. 5; p. 45 l. 12; p. 62 l. 21; p. 63 l. 4; p. 77 l. 21; p. 78 l. 6; p. 97 ll. 18, 22. Md. Amīn has again the literary form: سیصد Teufel, o. c., p. 361 l. 7

[5] Here ʿAbdul-Karīm has, however, the literary form پانصد p. 58 l. 9.

[6] The same, seemingly, in Tājīkī: ʿAbdul-Karīm has the same numeral in the same shape p. 103 l. 11, and, بیست چهار for "twenty four" p. 4 l. 20 Md. Amīn omits the conjunction also in other cases, but replaces the same by *a ẓamma* as recorded by Teufel, o. c., p. 245.

دو نیم روپیه = P. دو روپیه و نیم and does not mean "*two half-rupees*", as it would seem on the face of it, but "2½ rupees"; [1]

سال (sic) یکنیم does not mean "half a year", but "a year and a half";

دو نیم صد is not "100" ("two half hundreds"), but "250".

AA سه نیم ملیون does not mean "three half-millions", but "three millions and a half";

In certain cases numerals are apt to take an *iẓāfa*. Thus *dū-yi awwalaš* ( دوی اولش ) "the two first ones" [2];.
*sē-yi dīgar* ( سهٔ دیگر ) "the three others".

The H. *lak* لک is, contrary to P., used in K. to denote "one hundred thousand".

The word *kurūr* ( کرور ), which means in P "half a million" (500.000) is used in K. in the sense attributed to it in India, that is for "ten millions" ("a crore").

## Pronouns

Some slight deviations from the P. forms of the Personal Pronouns are shown in K The pronoun of the first pers. Sing. drops generally in current speech the final *-n*, and is pronounced with the harsh *a*-sound peculiar to K., [3] so near to the long *ā*, that it is mostly impossible to distinguish that form from the first pers plur., which is often used in popular speech instead of the singular form by modesty or by courtesy, so to say. As we encounter it, however, sometimes (though very seldom) in writing spelt as مه (*ma*), [4] there cannot be the slightest doubt as to the existence of such a form to denote the singular pronoun.

The pronoun of the first pers. plur. is mostly used in K. with a plural termination in the form *māyān* ( مایان ), both in speech and in written documents. This form seems to have altogether superseded the shorter form, which is, however, often used in vulgar polite speech, along with *ma* by a single

---

[1] Cf. also my "Afghan Weights and Measures", JASB, XXIV, 1928 p. 424, note 4.

[2] Thus also 'Abdul-Karīm in a passage altogether misunderstood by Schefer, text p. 95 l. 6–8; هفت شهر که بسر حد ملک خطا قربست مثل کاشغر و یارکند و خطن و آقسو و ایله و دوی دیگرست. *

[3] Registered by us above in the chapter on pronunciation as $a_0$.

[4] Cf. for this for instance, my "Notes on the Afghan Periodical Press" "Islamic Culture" (Hyderabad, Deccan) No 1 vol. III, 1929, p. 151 (or p. 26 of the separate reprint). Cf. also the above quoted remarks on Dēhwārī in L.S I., vol. X, 452.

speaker when referring to himself. To indicate plurality the word *mardum* "people" is sometimes added to the shorter form, the expression *mā mardum* ( ما مردم )[1] taking then the place of the more current *māyān*.[2]

Exactly the same can be said with regard to the 2nd. pers. Plur where the form *šumāyān* ( شمایان ) is predominant, alternating in isolated cases with *šumā mardum* ( شما مردم )[3].

The 3rd pers. Plur of the personal pronoun is *ūšān* ( اوشان ),[4] as against P. ایشان. One encounters sometimes also a corrupted form *ūnā* ( اونا ) [*AA.*, *OL.*], which outwardly seems to be a contamination of the colloquial P. pronunciation of the plural form of the demonstrative pronoun, ( آنها pronounced *ūnhā*) and of the 3rd pers. Sing. of the personal pronoun ( او—*ū* ) but which is, in fact, the plural of the demonstrative pronoun *ū*, with an incremental-*n* of the same kind as in *sūn*, *galūn* (v s p. 11) and *fırıstāndan* (s infra, p 31).

The pronominal affixes are of a somewhat less extensive use than in P. Their position in the sentence seems to be looser than in P., which produces in the 1st person by contamination with the personal termination of the verb, very strange forms, the real meaning of which is no more realized by the natives[5].

This looseness of connection between the pronominal affixes and the words to which they belong finds in K. a graphical expression as well, these affixes being mostly written

---

[1] Cf. Morgenstierne, Report, p. 8, also Teufel, Quellenstudien, p 247.

[2] The state of things in Tājikī is exactly the same. In fact, the form مایان is almost exclusively used in Abdul-Karīm's text, where we encounter it: p. 2 1 5, p 5 ll 16, 17, 19; p 7 ll 13, 17, 19; p. 11 l. 17; p. 16 l. 12 bis, p. 21 ll. 1, 6, 12; p. 22 l 19; p. 26 l 1; p 54 l. 21; p. 59 ll 17, 19; p. 65 ll. 19, 23; p 66 l 6; p 97 ll 11, 12 The shorter form ما occurs only once or twice, and then to denote the 1st pers. Sing. Md. Amīn has مایان T. p. 375 l. 11 and ما مردم T. 301 l. 31 note; T 375 l 9.

[3] The same in Tājikī: شمایان Abdul-Karīm p. 7 l. 14; p. 5 l. 12; p 16 ll 14, 16, p. 30 l 3; p. 33 l 23; p. 34 l. 1 bis. p. 51 l. 23; p. 52 l. 1; p. 56 l 15; p. 62 l. 3. Md. Amīn T. 373 ll. 1, 3. The latter has, however, once شما as against K.: T. 358 l. 12 از شما کسست.

[4] In Gīlakī also similarly *ūšōn*, cf. Geiger, Die Kaspischen Dialekte, (Grdr d. iran. Phil, I) p. 360.

[5] Cf. Vocabulary under *taslim*.

as separate words in cases where in P. they would be written conjointly with the word to which they belong. Thus:

عید استقلال تان مبارک "[may] your Day of Independence [be] blessed!" (in the heading of a printed programme of the Paghman *Mēla*). Words ending in a vowel often take before the pronominal affixes a connecting -*y*- (-ی-) and it is a question, whether that -ی- is not meant to express the status constructus (*izāfa*), e g, هر دوی شان = P. هر دو تا شان "both of them".—[1]

The possessive relation is expressed not by the *izāfa* as in P, but by the preposition *az* (از) "of", sometimes pleonastically preceded by the word *māl* (مال) "property", so current in P. which takes then an unnecessary *izāfa*: *kitāb-i māl-i az ū* "his book".—

The reflexive pronouns are the same as in P. *xud* (خود) and *xīš* (*xēš*) (خویش), the latter occurring in its pronominal sense only in writing (newspapers), whereas in current speech it is used only in its adjectival meaning of "relative". *Az xud* (از خود) means "own"[2] and is currently used in reply to the challenge of night watchmen, police, etc., in the same sense as the E. "friend"—

In current speech the reflexive pronoun *xud* is often used (and even misused) in the sense of "but" (or even without any particular sense which could be attributed to it[3]), where in P. the relative که would be expected. In this case, the final *d* of the word is generally dropped[4] Thus:

*tu xu raftī* ! "but you went (there)!"
*jūr xu astī* ? "but you are well?"

An uncommon in P. plural-formation *xudhā* (خودها), where one would expect in P. خودشان "themselves", often occurs in K[5]

The demonstrative pronouns are: *īn*, *ī* (این) "this", *ān*, *ū* (آن-او) "that". The forms این and آن are used in writing, but *ī* and *ū* prevail in current speech. The plurals

---

[1] Cf. above under "Numerals" سهٔ دیگو - دوی اولش

[2] Cf. also 'Abdul-Karīm, text, p. 90 l. 10: معتمدی از خود حاکم عرل کرد "établit comme gouverneur d'Aral un personnage possédant sa confiance" (Schefer, Traduction, p 199 l 11–12) —

[3] Cf. Ivanow, Tabaqat, p 33.—

[4] Cf also LSI, vol x, p. 452, where the same dropping of the final -*d* is recorded for Dēhwārī.—

[5] Cf. also Teufel, Quellenstudien, p. 247.—

*īnā* and *ūnā* seem to me to be formed rather from *ī* and *ū* with an incremental-*n*-, than from the correct literary forms. *hamē[n]* ( همین ); *hamān*, *hamū* ( همان · همون ); *činīn* ( چنین ) and *hamču* ( O.L. همچو ), *hamči* ( همچه ), as also the more usual in P. *hamčinīn* ( همچنین ). Not seldom all the three forms may be encountered in the same column of a newspaper article, etc.

The A. demonstrative pronoun هذا takes mostly the place of its Iranian equivalent in documents of the official kind:

موتر کار هذا "this motor car" (on a ticket for free admission to the Mēla of Paghmān);

بسا پورت هذا "this passport", and so forth.

The interrogative pronouns are the same *ki* ( که ) and *či* ( چه ) as in P.

The relative particle *ki* ( که ) is used in the same way as in P.

The indefinite pronouns are the substantival *kas* ( کس ) "somebody; anybody" and the adjectival *kudām* ( کدام ) "some" the latter most extensively and sometimes pleonastically and, so to say, unnecessarily used in that sense in K., whereas the same word is only an interrogative pronoun in P. meaning "which?" Thus

*kasi nabūt* ( کسی نبود ) "there was nobody";

*kudām ādam āmada* ( کدام آدم آمده ) "a man has come"

Other indefinite pronouns are: *īč* ( هیچ ) "some", with a negation "none"; *ar* ( هر ) "every" and *ama* ( همه ) "all", the latter two being often confused with each other and *ar* taking often the meaning of *ama*: *ar šaw* ( هر شب ) not necessarily meaning, for instance, "every night", but very often "the whole night", etc.

*ar* ( هر ) takes sometimes also the place of *īč* ( هیچ ) as well, and is used with a negation For instance:

AA. و در هر موقع از بذل شفقت مادرانهٔ خویش خودداری نکرده اند

"and on no occasion has she (the Queen) abstained from displaying her motherly kindness (lit: "and on every occasion, she did not abstain", etc.)[1].

Other indefinite pronouns are the same as in P.—

[1] Cf. also for a similar expression 'Abdul-Karim, text, p. 54 l. 19.

## The Verb

The 1st pers. Sing. ends in *-um*,[1] as against P. *-am* One is sometimes fortunate enough to come across such pronunciation expressed even in writing:

OL. دارُم (sic: *dārrum*) = P. دارم "I have".

In the 3rd pers. Sing. the final *-d* is generally dropped by the illiterate and in current speech, which latter, however, is the case in P. as well. Thus:

*mēšava*, *mišava* = P میشود (pronounced *mišavad* and, in current speech, *mišē*) "it is possible; it is all right".—[2]

In the 2nd pers. Plur. the final *-d* of the termination has a tendency towards becoming *-n*, which tendency is, however, common also to P. current speech A good example of it is found in Specimen II of Badakhshī LSI, vol. X p 530:

*kamar basta-kunēn* "gird up [your] loins", along with the ordinary form *kuned* (probably a misprint for *kunēd*) a few lines above in the same *Specimen* II.[3]

The 3rd pers Plur. generally drops the final *-d* of the termination, again a peculiarity common to P. as well, where the sole distinction in current speech between the Infin and the 3rd pers. Plur. Past Tense lies in the accentuation (*raftán* "to go"— *ráftan* "they went").—

The Future Tense is formed as in P. by means of the auxiliary verb *xāstan* (خواستن) "to wish; to will", but the treatment of the component parts (i.e. of the verb conjugated and of the auxiliary verb) is essentially different from the standards firmly established and common both to literary Persian and to P.

No single definite rule covering the whole of the Future conjugation in K. can be established. For the 1st pers. Sing. and the 1st pers. Plur. the auxiliary verb is used in the 3rd pers. Sing. Pres Tense and the verb conjugated takes the personal forms of the Past Tense. Thus the Future Tense will be:

---

همیشه بی صحبت علما نبود "he was never without the company of the learned" (lit. "he always was not", etc) It is unnecessary to add that such turns of phrase are entirely foreign to and inadmissible in P.—

[1] Cf. also Ivanow Rustic Poetry, p. 252.—

[2] Cf. also Lorimer, Phonology p. 140 § 16.—

[3] Lorimer, Phonology, gives throughout forms in *-in* for the 2nd pers. Plur. in his paradigms (pp. 161-166), but does not otherwise point out this peculiarity.—

1st pers. Sing. *xāhad raftum* ( خواهد رفتم ) = P خواهم رفت
or *či xāhad kurdum?* ( چه خواهد کردم ) = P. چه کنم
"what shall I do?"
1st pers Plur *xāhad xāstīm* ( خواهد خواستیم ) = P. خواهیم خواست
e.g. OL. نخواهد حواستیم (*naxāhad xāstīm*) 'we won't demand".

For the 1st pers. Sing., however, a combination of the 3rd pers. Sing of the auxiliary verb with the first pers Subjunctive Mood of the verb conjugated is also used [1]

The 3rd pers. Sing. uses the same form of the auxiliary verb, but the verb conjugated is taken in its Subjunctive Mood Thus, from the verb بودن "to be" the Future Tense will be: 3rd pers. Sing. *xāhad bāšad* ( حواهد باشد ) = P خواهد بود

e.g. *dar manzil xāhad bāšad* 'he will probably be at home".

The 2nd pers. Plur. is formed by prefixing the personal form of the auxiliary verb to the Infinitive of the verb conjugated. Thus:

2nd pers. Plur. *xāhīd raftan* ( خواهید رفتن ) = P. خواهید رفت

e.g. *sabāh wáqit xāhīd raftan?* ( صباح وقت حواهید رفتن ) = P. صبح زود خواهید رفت "will you be going early in the morning?"

The 2nd. pers Sing. and the 3rd pers Plur. are also formed in the same way, i.e.:

2nd pers. Sing *xāhī raftan* ( خواهي رفتن ) = P. خواهي رفت

3rd pers Plur. *xāhan raftan* ( خواهند رفتن ) = P. خواهند رفت

For the 2nd and 3rd pers. Plur. we find, however, also another and most interesting formation, the auxiliary verb being used, as above, in its personal form and followed by a form ending in *-a* of the verb conjugated I suggest that this form is a curious remnant of an ampler obsolete form of the Infinitivus apocopatus, otherwise untraceable either in P. or in literary Persian, the similarity in form of which with the Past Participle is merely a fact of casual external coincidence. Thus, for instance. OL. روز را آنجا ..... حواهند گذاشت = P. خواهند گذاشته "they will pass the day there"

If we sum up what has been said here, we arrive at the following paradigm of the Future Tense in K.: [2]

---

[1] Cf. also Morgenstierne, Report, p. 8.—

[2] I take here deliberately only such formations as have been

**Singular**

| | | |
|---|---|---|
| 1st pers. | *xāhad raftum* | *xāhad bugīrum* |
| 2nd ,, | *xāhī raftan* | |
| 3rd ,, | *xāhad raft* | *xāhad bāšad* |

**Plural**

| | | |
|---|---|---|
| 1st pers | *xāhad xāstīm* | |
| 2nd ,, | *xāhīd raftan* | |
| 3rd ,, | *xāhan raftan* | خواهند گداشته[1] |

These heterogeneous and heteroclite formations are so singular, that one is irresistibly compelled to ask the question: where do these formations come from?

I feel tempted to suggest that these formations must be of a quite recent origin, with the exception of those of them which contain the I n f i n i t i v e of the verb conjugated in its full form and that, up to recent times, K. was probably unacquainted with the use of any compound Future Tense in its form current in P. The Present Tense or Subjunctive Mood forms did probably serve to express the idea of futurity as well, for which we have sufficient proof in P., where these forms are freely used along with compound formations to denote a n e a r or an indeterminate future. Most probably, in older K. a kind of compound Future formation consisting of the personal forms of the auxiliary verb in the Present Tense accompanied by an Infinitive were in exclusive use. We have such forms in the 2nd pers. Sing. and the 2nd and 3rd pers Plur of our paradigm.

We cannot account for formations such as the 1st pers. Sing. and Plur. of our paradigm (in the first column) unless we hold that the 3rd pers. Sing. (*xāhad raft*) was more or less recently imported from outside (Persia). If the Persians themselves f e e l the different origin of the two externally coinciding forms of the I n f i n i t i v u s a p o c o p a t u s and the 3rd pers. Sing. Past Tense,—the Afghans certainly d o n o t.

I maintain, therefore, that formations like *xāhad raftum*, *xāhad xāstīm* are K neologisms based on a total misunderstanding of the real value of the apocopated form of the Infinitive in P. compound Future formations, where the second link of the compound was mistaken by the Afghans for a 3rd pers. Sing. Past Tense, and endeavours were made by them in consequence to construct forms for the remaining persons on the same pattern. The forms so coined were adopted

---

recorded by me in Kabul as actually heard in current speech or seen in writing. This accounts for the different verbs used in the paradigm —

[1] The forms given in transcription are those heard by me in speech the one in original characters has been seen in writing.—

and became very current, but must have struck the natives themselves as being somewhat queer, which resulted in further gropings towards some more satisfactory combinations. Hence the forms recorded in the second column of our paradigm.[1]—

Another phenomenon peculiar to K. and unknown in P. is the extremely current habit of splitting verbs, in the sense of fabricating new compound verbs out of the most ordinary simple verbs in general use. These new composite verbs are coined on the pattern of the ordinary composite verb in P., where one of the auxiliary verbs added to a noun or an adjective contributes to the latter the necessary verbal sense. In K. formations under discussion the place of such noun or adjective is taken, however, by the Past Participle, the Present Participle, or the Imperative of an already existing and otherwise currently used verb, the meaning of which is integrally transferred to such a new composite formation A few examples will suffice:

*basta kardan* ( بستة كردن ) } =P. بستن "to shut: to
*band kardan* ( بند كردن ) } close".

e.g. *darwāza basta* (or *band*) *ku* ( دروازه بستة - بند - كن ) "shut the door!"—

*nuwišta kardan* ( نوشتة كردن )=P. نوشتن "to write".

*dānista šudan* (دانستة شدن )=P. دانستن "to know; to understand".

e g. *ki dānista šawum* "so that I should know".

*istāda kardan* ( استادة كردن )=P. وا استادن "to stop".

e.g. *istāda ku* ( استادة كن )=P. وا است "stop!" (when telling a coachman, etc., to stop).

*pursān kardan* ( برسان كردن )=P برسدن "to ask".

*zāt kardan* ( زاد كردن )=P. زائدن "to give birth".

*dāšta būdan* (داشتة بودن)=P. داشتن "to have, to possess",

---

[1] I am unable to trace any compound Future formations in 'Abdul-Karīm's text, and the solitary instance of a compound Future that I find in Md. Amīn: گمان من بود كه توسن فلك .... عنان كام و مراد در قبضهٔ اقتدار و اختيار او خواهد ماند (T 366 l. 12) only serves by its context to show, to what extent that author was under the influence of literary Persian, a fact severally pointed out by Teufel himself in the course of his monograph.— A further indirect proof of the recent origin of these formations in K. is, in my opinion, the total absence of any mention of a Future Tense in Lorimer's otherwise extensive and detailed paradigms of Badakhshānī and Madaglashtī conjugations (Phonology, pp. 161–166). Nor does he as much as mention the existence of any Future Tense anywhere else in his above mentioned sketch, though, of course, the material Lorimer had at his disposal seems to have been extremely meagre.—

e.g. OL. اطلاعی نداشته میباشند = P. اطلاع ندارند "they have no information".

The examples of such composite formations could be multiplied, as there are practically no limits to this forcible disintegration of common P. verbs.

The utter unnecessariness of such a procedure and the clumsiness of the forms thus obtained are such as to call for an inquiry into their possible origin Yet, I am unable to suggest any plausible hypothesis, except that they must be comparatively[1] recent and have possibly come into existence under some foreign influence, formed, it may be, on the analogy of similar expressions in some non-Iranian language[2]

The negation is placed in K., as against P, before the verbal prepositions. Thus:

*nabrāmada* (نه بر آمده) = P. بیرون نیامده "he has not come out";

*ma nawar-dāštum* (من نه ورداشتم) = P. من ور نداشتم "I did not take (it)".

The particle *mī*-is also placed in K. before the verbal prepositions. Thus:

AA. میبراید (sic *mībrāyad*) = P بیرون میاید "comes out";

AA. از بین میبردارد (*az bayn mībardārad*) = P. از بین بر میدارد "takes away; makes lose; destroys".

The particle *mī*-precedes in K., as against P., the negation. Thus:

*minabrāyad* (می نه بر آید) = P. بیرون نمیاید "he won't come out".[3]

---

[1] I cannot trace any such expressions, in 'Abdul-Karīm's text and I find only one instance of such a split verb in Md. Amīn نواخته میکردی "he was playing (the tune of....)", with a pleonastic *yā yi istimrārī*, instead of مینواخت.—

[2] The expression *band kardan* and *basta kardan* remind one persistently of the H. بند کرنا, and it is very difficult to decide, as in most instances where we find analogous expressions in K. and in H., whether the H. expression is the original or whether it is rather formed on the analogy of the K. construction.—In my opinion, the latter is mostly the case.—These split-verb formations could, on the other hand, have been influenced or introduced by Central Asian Turks.—

[3] We find, however, such a sequence in older literary Persian: Cf., for instance Minūčihrī اسپی که صفیرش نزنی می نخورد آب الخ (A. de Biberstein-Kazimirski, Menoutchehri, poète persan du

In composite Tenses the negation in K. is tacked on to the auxiliary verb Thus, for instance :

AA. تحصیل کرده نبود = P. تحصیل نکرده بود "he has not studied".

The Past Participle is very largely used in K., sometimes pleonastically, e g :

*bēl girifta biyār* ( بیل گرفته بیار ) = P. بیل بیار "bring a spade", where one is inclined to think of the H *lē āo*. But, I repeat it again, it is difficult to say which way the influence has been displayed.—

Impersonal sentences expressed in P. simply by means of the 3rd. pers Plur. Pres. Tense, are mostly rendered in K by the Past Participle of the verb with the 3rd pers Sing of the auxiliary verb شدن, e.g :

*gufta mēšava* ( گفته میشود ) = P. میگویند "it is said".

AA. انتظار کرده میشود که = P. منتظر آن هستند که "it is expected that.."

Such split-verb (or otherwise) Passive formations are apt to govern in K. the Accusative case, e g. :

AA. مسافر کسی را گفته میشود = P مسافر کسی را میگویند "a traveller is called a person, who...."

AA دو نفر مرتکب یک جنایت را مرتکب میشوند = P. دو نفر یک جنایت را مرتکب میشوند "two persons commit the same crime" —

No clear distinction is made in K. between the A. Participle and the A. verbal abstract noun (*masdar*). This limitation becomes most conspicuous in the construction of composite verbs, like ·

*mumkin dāra* ( ممکن دارد ) [Ameer in a speech] = P. امکان دارد or ممکن است "it is possible";

*rizā šudan* ( رضا شدن ) = P. راضی شدن "to agree";

*tasarruf šudan* ( تصرف شدن ) = P. تصرف نمودن "to conquer to occupy" ·

AA فشون فرانسه زول را تصرف شدند = "the French troops have occupied Z";

*safā kardan* ( صفا کردن ) = P. پاک کردن "to clean".—

Very peculiar are certain forms of the Past Participle in *-ak* instead of the ordinary-*a*-termination, current, however,

---

11 ème siècle, etc., Paris 1886, text p. 14.)—cf. also Ivanow, Tabaqat p. 346-7: می رد کرده اند :—

only, it would seem, in the speech of Hazāras.[1] For instance:

*ū būdak* = P. او بود "he was";

*ma hastak* = P. من هستم "I am";

*āwurdak* = P. آورد - آورده "he brought".

Abstract nouns derived from the Past Participle, which are certainly closely connected with the forms mentioned here[2], seem also to be currently used among the Hazāras[3].

Causative verbs are far more current in K. than in P. Two groups of such verbs deserve, however, a special attention. The first of these groups we might class as unnecessary formations, like the above discussed split-verbs, that is, new secondary formations to which the meaning of the original verb is integrally attributed. For instance:

*šikastāndan* (شکستاندن) = P. شکستن "to break":

*ī āyīna-rā ū šikastānd* (این آئینه را او شکستاند) "it is he who has broken this window-pane";

*firistāndan* (فرستاندن = P. فرستادن "to send, to dispatch, to forward":

*ī xatt-rā ba wazīr sā'ib mīfiristānim* (این خط را بوزیر صاحب میفرستانیم) "we shall forward this letter to the Minister".—

As regards this latter verb, for all we know, the -*n*- in it might be merely an euphonical incremental consonant. Or else, the verb فرستادن probably imported at some comparatively late period from Persia (the current K. variant of it *firistīdan* being unmistakably very old) was somehow felt as being, owing to the presence of the long -*ā*-, a kind of causative from the usual *firistīdan* and the -*n*- was inserted in order to make it more "regular-like". However it be, the verb *firistīdan* is used nowadays in current popular speech in K. and *firistāndan* in official correspondence, newspapers, etc. The latter form seems to be also extremely common (if not exclusively used) in Tājikī[4].

---

[1] My attention was first drawn to these forms by Madame A. Foucher, who accompanied in 1923-1925 her husband to Afghanistan on his archæological mission and had many opportunities of coming across Hazāras in their own country. I have since often heard such forms from Hazāras residing in Kabul.—

[2] v. ante p. 17.

[3] Cf. Morgenstierne, Report, p. 8.—

[4] In 'Abdul-Karīm's text we find: میفرستانم p. 33 l. 18; p. 35 l. 1; p. 81 l. 6; میفرستانی p. 102 l. 12; نمیفرستانید (2nd pers. Plur.) p. 26 l. 6;

The second group are causative verbs derived directly from A. abstract nouns (*maṣdars*), e g :

*qabūlānīdan* ( قبولانیدن ) " to make accept " :

*ī-ra-ba-ū mīqabūlānīm* " we will make him accept it " ; [1]

*qawlānīdan* ( قولانیدن ) " to promise ; to guarantee " (v Vocabulary) [2].

The verb *fāmānīdan* ( فهمانیدن ) 'to make understand", although not used in P., is not derived, like the preceding one, directly from an A. noun, but is a regular causative to the simple فهمیدن (in K. pronounced *fāmīdan*), very current both in K. and in P.

For other causatives not used in P. v. Vocabulary under *dānānīdan*, *guzaštāndan*, *pazīrāndan*, etc.

Two peculiar composite verbs *taslīm šudan* and *dānista šudan*, the real syntactical meaning of which is lost as far as the Afghans themselves are concerned, deserve a more special attention. The first of these verbs is used in K. in two different meanings. The first of these meanings (v. Vocabulary) is based on the above-discussed confusion in K of A. Participles and verbal nouns (*maṣdars*) and does not present any special interest beyond that current K. irregularity.

The second meaning of that verb, which would be understood in P as "to be handed over, to be transmitted" is singularly enough not a Passive, but an Active and transitive one in K., where it is taken to signify " to receive". The expression " I have received " or " received by me " in receipts (for salaries, others sums of money, letters, etc.) is rendered in K. by تسلیم شدم (*taslīm šudam*). Moreover, the expression امضاء تسلیم شونده in accountancy ledgers, or printed receipt-and acknowledgment-

---

فرسانید (id.) p. 34 l. 23 , فرسانند p. 101 l 9 ; فرستانید (3rd pers Sing. Past Tense) p 26 ll 5,13 ; p. 63 l. 5 —The instances of that verb in Md. Amīn's text are enumerated by Teufel in his above-quoted monograph on p. 251.—

[1] The verb in question most singularly reminds one of the Huzvarišn form *maqbalūntan* in Pahlavi, the Iranian equivalent of which is *padiraftan* " to accept ", and more especially of the form in Ys. 8, 9/4 *maqbalūniyayēt* quoted by Salemann in his Middle-Persian Grammar (Grdr. d. iran Phil. 1 p. 315) as a Passive Present. The absence in K. of any simple verb of this root and the existence in current use in K. of an Iranian equivalent (v. Vocabulary), emboldens me to suggest that this might be one of the rare cases of a Huzvarišn word finding its way into colloquial Persian where the Aramaic prefix *ma-*, after the word had been taken up integrally, was turned into the Iranian verbal particle *mī* —

[2] This verb seems to be formed on the analogy of the preceding and has also no simple form.—

forms (of the Post Office, the Telegraph Office, etc.), in the headings of the signature column in peon books, etc., clearly shows that the verb *taslīm śudan* is considered in K. to be an Active transitive verb, not a Passive formation as in P.—Such a way of using and understanding that compound verb is based on a misinterpretation of an old construction with the pronominal affix appended to the auxiliary verb instead of the substantival part of the compound. As has been already pointed out, the connection between the pronominal affix and the word to which that affix logically belongs is somewhat loose in K. (as most certainly also it was in Pahlavi). In the particular expression we are discussing the pronominal affix was probably tacked on to the auxiliary verb in order to avoid the repetition of the same consonant in the termination of the word *taslīm*. Thus, naturally, تسلیم شدم is equal to تسلیم=تسلیمم شد من شد.—The etymological sense of the combination was later on, and probably long ago, lost from view, which in consequence gave rise to such unwarranted expressions, as the above quoted امضاء تسلیم شونده.—

The verb *dānistan* ( دانستن ) "to know" is currently used in K. also in the meaning "to understand" (along with *fāmidan*, v. Vocabulary). It is in this particular meaning that it has given rise to a form entirely analogous to the above-discussed *taslīm śudan*: *dānista śudam* ( دانسته شدم ) does certainly not mean "I became known", but, being a 3rd pers. Sing. Past Tense with the pronominal affix of the first pers. tacked on to the very end of the compound, it is equal to دانسته ام شد= دانستهٔ من شد "it became known to me". A further proof (if any is required) of the correctness of my interpretation of the above two strange expressions is found in the polite phrase often recurring in K. conversation: *dānista-yi śumā śuda bāśa* (دانستهٔ شما شده باشد) "you might have understood.." or "I hope, you understand ..", where the place of the pronominal affix is taken by a personal pronoun, revealing thereby the underlying construction of the preceding expression.

The verb *tuwānistan*, *tawānistan*, *tānistan* ( توانستن ) "to be able", constructed in P. g e n e r a l l y with the Subjunctive and only in impersonal sentences with the I n f i n i t i v u s a p o c o p a t u s, governs in K. throughout the ampler old form of the apocopated infinitive, a glimpse of which we had when discussing the formation of the compound Future. E.g.: *gufta namīt[aw]ānum* ( گفته نمیتوانم ) = P نمیتوانم بگویم "I cannot say" or "I could not say":

AA. تواند شده=P. تواند شد "can become";

AA. ذهنیت آنها را اصلاح کردہ میتوان "their mentality could be improved";

AA. استهزا شده نمیتواند "cannot (i.e., must not) be mocked at";

*fāmānida t[aw]ānistum* (فهمانیده توانستم ؟) "was I able to make myself understood?" or "... to make you understand?"[1]

A further peculiarity of the verb *t[aw]ānistan* in K. is that it can be used with abstract nouns or adjectives unaccompanied by any auxiliary verb (which occasionally also occurs in P.) E g.:

*isbāt mīt[aw]ānīm* (اثبات میتوانیم)=P. میتوانیم ثابت نمائیم "we can prove (it)";

*xarīdārī na mīt[aw]ānum* (خریداری نمیتوانم)=P نمیتوانم اقدام نمایم "I am not in a position to purchase";

AA. دست درازی نمیتوانند "they cannot lay hold on . . ";

AA. آیا مطیع میتوانید ؟ "can you make (them) obey?";

OL. مخابرات تلگرافی میتوانند "they can communicate by telegraph";

OL. اقدام میتوانند "they can take (the necessary) steps";

OL. باید همراهی و معاونت بتواند "he must be able to help and assist".

An analogous construction can also be noticed with the verb *majbūr būdan* (مجبور بودن) "to be compelled"; for instance:

---

[1] Lorimer Phonology, records for Badakhshani and Madaglashtı, however, only the construction with the Infinitive in its full form.—

As regards Tājīkı, we find in 'Abdul-Karīm's text mostly constructions with the full form of the Infinitive, namely: توانی کردن p. 54 l. 8; نمیتوانست کردن p. 57 l. 8-9; نتوانند آمدن p. 62 l. 20; و فاطر نمیتواند عبور; p 82 l. 10; کار تواند کردن p. 101 l. 7; نمیتوانم کردن p. 103 l. 13; میتوانند رفتن p. 103 l. 18; میتوانند شال بافتن p. 105 l. 15; نمیتواند گرفتن p. 108 l. 6.—One instance of a construction with an infinitivus apocopatus, where in P. the Subjunctive would have been used is encountered on p. 82 l. 10-11: توانیم نمود and one solitary instance of the correct use of the apocopated infinitive is found in the inpersonal sentence میتوان گفت on p. 77 l. 8-9. I find only one instance of the Infin-apocop., but used contrary to P. syntax, in Md. Amīn's text: سر نتوانستند بر آورد T. 299 l. 30.—

AA. شرکت قیمت آن را مجبور است "the Company has to pay its value",

—, where we should expect, in conformity with the P. syntax some verb to be added to the noun قیمت in order to warrant the verbal meaning attributed to it, say بدهد or بپردازد "to pay", "to discharge".—

The verb *māndan* (ماندن) "to remain" is used in K. almost exclusively in the transitive meaning "to leave", a meaning entirely foreign to P. but encountered in isolated instances, along with its usual meaning, in older literary Persian [1] One example will suffice:

*māndum da sar- i mayz* (ماندم در سر میز) = P. گذاشتم رو میز "I put or left (it) on the table".[2]

In connection with the word *nām* "name" the verb *māndan* is also used in the transitive sense in preference to the equally current verbs *guzāštan* and *n[ih]ādan*, e g.:

*alā'azrat-i šahīd Ustur nām māndan* (علی حضرت شهید استور نام ماندند) "His Majesty the Martyr (i.e., Amīr Ḥabībullāh-

---

[1] I am able to quote here an example from Sa'dī's Būstān, where that verb is used both in the transitive and the intransitive sense, namely in the story of the "Idol of Somnath":

که گر زنده اش ماني آن بی هنر   نخـــواهد نـــرا زندگانی دگـــر

"since, if you leave him alive, etc" (Lahore lithographed edition of 1917, p. 420) and four lines earlier in the story (p. 419) the same verb is used in its usual meaning:

که دانستم ار زنده آن برهمن   بماند کند سعي در خون من

"because I knew that, if that Brahman remained alive, etc."—

A. de Biberstein Kazimirski, in the preface to his edition of the already cited dīvān of Minūčihrī, quotes (p. 64 note) from the Ta'rīkh i Mas'ūdī of Bayhaqī the sentence امیر المؤمنین را چون ماندي which he translates "en quel état a tu laissé le Prince des croyants?" and remarks on the "emploi du verbe ماندن comme verbe actif, emploi, du reste, en usage à cette époque" (i e., in the V century A.H. = XI century A.D) cf. also ibid. p. 106, note 2.—

[2] In Tājīki the state of things seems to be exactly the same: 'Abdul-Karīm's text contains the following instances of the use of ماندن as a transitive verb: در کابل شیر محمد خان ولد وزیر سابق احمد شاه را شاه ولي خان حاکم ماند p. 19 l. 19; و زمان شاه را در بالا حصار کابل p. 23 ll. 3-4; طپانچه را بسینه اش ماند p. 30 l. 13; ........ بقفس ماندند همگی سخن را یکجا ماندند p. 73 l. 21.—

The only instance of such a use of ماندن in Md. Amīn's text, T 366, l. 12 has already been quoted by me for another purpose supra p. 28 note.

Khan) gave it (the building of the Foreign Office) the name S t o r".[1]—

In connection with the noun *kār* "work" *māndan* is used intransitively in the expression

*az kār māndan* ( از کار ماندن ) =P. از کار باز ماندن "not to work; to be without work; not to be admitted to work".—

The Past Participle *mānda* ( مانده ) is used in the sense of "tired", where in P. the word خسته would be rather applied: *mānda nabāši* "I hope, you are not tired".—This meaning of the verb *māndan* "to be tired" goes as far back as the pre-Muhammadan period: P h l. *māndakīh* "weariness"

The conjugation of *māndan* presents the peculiarity that in the Imperative and Subjunctive Moods the particle *bi*- coalesces with the body of the verb, thrusting out at the same time the initial *m*-, thus;

*bān*, *bānum* corresponds to P. بمانم—بمان. This transmutation might have proceeded along one of two lines: either the initial *m*- of the stem was first assimilated in rapid speech with the *b*- of the particle, which further lost its vowel and then disappeared altogether, which is, in my opinion, less probable; or else, there first occurred an elision of the vowel in the particle[2], resulting in an initial *bm*-, which by metathesis became *mb*- and was further worn off to a mere *b*. This latter hypothesis seems to me more plausible[3]

We should thus have the following two possible schemes for the course of that transformation:—

either *bimān* > *bibān* > *b'bān* > *bān*
or *bimān* > *b'mān* > *mbān* > *bān*.

The verb *raftan* ( رفتن ) "to go" in its personal forms is currently used in K. with any Past Participle to indicate continuity of the action expressed by the latter. That turn of phrase could be expressed in English by the verb "to go on" with a P r e s e n t Participle and corresponds to the P. expressions constructed with the personal forms of the verb داشتن accompanied by the corresponding forms of the verb conjugated, with the particle *mī*- prefixed to the latter. The following examples will make this clear:—

*hay xurda mērum* ( هي خورده مروم ) =P. هي دارم ميخورم "I am eating and eating";

---

[1] Cf. also in 'A b d u l-K a r i m's text: نامش جان نثار خان مانده بود p. 42 l. 10.—

[2] As in *b'rāmadan*, v. s u p r a, p 29 and Vocabulary s. v.—

[3] Cf. L o r i m e r, Phonology, p. 144 § 27 (a) and (b).—

AA. زیاده شده میرفت =P داشت زیاد میشد "went on increasing";

AA. کابل بتدریج ترقّی کرده میرود =P. ......دارد ترقّی میکند "Kabul goes on progressing gradually";

AA. قوّای خودرا در چین افروده میروند =P. .... ... دارند میافزایند "they go on increasing their forces in China";

AA. عقب نشسته میروند =P. دارند عقب مینشینند "they go on retreating";

MA. رو در ترقّی گذارده میرود =P. رو بترقی دارد میکند "goes on looking for progress".

These examples could be multiplied indefinitely, as this mode of expression is extremely common, both in speech and in writing.—

The conjugation of the verb *raftan* offers few peculiarities beyond those common to the K. verb in general. The 1st pers. Sing. Pres. Tense is used mostly in its contracted form, the other persons, barring, as said, the specific K deviations, (i.e, the dropping of the *-d* in the 3rd pers Sing. and the 3rd pers. Plur., and replacing that of the 2nd pers. Plur. by *-n*) are regular:

| | | | |
|---|---|---|---|
| 1st | pers. | Sing. | *mērum*[1]. |
| 2nd | ,, | ,, | [*mī*= ] *mērawī*[2] |
| 3rd | ,, | ,, | [*mī*= ] *mērawa* |
| 1st | ,, | Plur. | [*mī*= ] *mērawīm* |
| 2nd | ,, | ,, | [*mī*= ] *mērawīn* |
| 3rd | . | ,, | [*mī*= ] *mērawan* |

The Past Tense offers no peculiarities beyond those already discussed

In the Imperative Mood the prefix *bi-* is not synharmonized with the stem as in P.:

2nd pers Sing. *biraw*.
2nd ,, Plur. *birawīn*.

## The Adverb

There is little to be noted about the adverb in K beyond the immoderate use of A. Accusatives for adverbial locutions where in P. the adjective is used in its indeterminate form, with the A. termination dropped, to express the same meaning.

---

[1] I have not heard this form with a *yā-yi ma'rūf*

[2] This and the remaining forms are currently heard either with *mī-* or with *mē-*.—

(Anīs[1].) *aksaran* ( اکثراً ) = P. اکثر "mostly"
" *aγlaban* ( اغلباً ) = P. اغلب "chiefly"
AA. *mukarraran* ( مکرّراً ) = P. مکرّر "repeatedly"
" *alāwatan* ( علاوةً ) = P. علاوه "besides".

On the other hand, sometimes when we find in P. an A Accusative with an adverbial meaning, the same word is apt to be used in K in its indeterminate form, e.g.:

AA اتّفاق (*ittifāq*) = P. اتّفاقاً (*ittifāqan*) "suddenly; by chance".[2]

A. Passive Participles in the Accusative are sometimes used in an adverbial sense, when in P. one would expect a *masdar* either in the Accusative or, better, with some preposition, e.g.:

OL مُحتَرَماً = P. احتراماً or, better, با کمال احترام "respectfully".

A hybrid expression consisting of an unnecessary A. Accusative followed by a Persian relative pronoun is:

AA. وقتاً که = P. وقتیکه "at the time, when".

The negative adverb "no" (P. نه - خیر or خیر) is in K. *nay* (نَي) It has to be taken into consideration that in earlier literary Persian there existed originally four different words to express the negation, independent (adverbial) or dependent (particles)

The negative adverb seems to have been always the same *nay*, as we have to-day in K.[3]

---

[1] See my "Notes on the Afghan Periodical Press", Islamic Culture (Hyderabad, Deccan) vol III 1, 1929, p. 147 ff. (or separate reprint p. 22 ff)

[2] also found in 'Abdul-Karim's text, p. 102 l. 6: اتفاق البلچی خوقند را .... بآب اندراخته مقتول ساخت *

[3] We find in a poem attributed to Abū Sa'īd b. Abī-l Khayr (Zhukovski's edition of the Asrār u-t-tawḥīd, p. 370 l 12)

نی نی ز ختن باد چنان خوش نوزد هیچ "no, no! such a pleasant wind never blows from Khutan".—Examples of this form of the negation can be easily found in literature · at the present moment, I can quote only one more instance of this reduplicated *nay*, viz., in the Dīvān of Shams-i Tabrīzī: نی نی تو نهٔ محرم این راز نهانی (the Nawal Kishore edition, p. 201 l. 4) "no, no! thou art not a confidant in this hidden secret".—

The negative particle with verbs was *na*-( ..ـنـ ) "not".

The negative particle with nouns and adjectives was *nā*- ( نا ) "un-".

The prohibitive particle (with the Imperative Mood of the verbs) was *ma*- (.. ...ـمـ ) "not".—

A great deal of confusion with regard to the correct use of these different words seems to have prevailed already in very early times, so that the above differentiation has rather a theoretical than a practical value. As far back as Pahlavi only two forms have been recorded: one form *nē* (written ideogrammatically *lā*) for the three first forms of our scheme, and the prohibitive *ma* (written *hal*). So that the differentiation into our four forms must have first originated in Islamic times to lead merely to further confusion. As far as P. is concerned, the difficulty seems to have been definitely solved by: (1) discarding altogether the prohibitive particle *ma*-(.... ـمـ), the place of which is henceforward taken by the ordinary negative particle ( ..ـنـ ); (2) by preserving in connection with nouns and adjectives the particle *nā*- ( نا ); (3) by blending into one word in two forms the negative adverb *nay* ( نی ) and the negative particle *na*- ( نه or .. ـنـ ) in such a way that, whatever the shading of the negation, it is always expressed by *na*- ( نه or.. ـنـ ), except in the case when it precedes a verb beginning with a vowel. in which case the form *nay*- ( . .. ـنـ ) reasserts itself.

We thus have:

| | P. | K. |
|---|---|---|
| Negative adverb: | *na* ( نه ) | *nay* ( نی ) "no" |
| Negative particle with adjectives and nouns: | *nā*- ( نا ) | *nā*- ( نا ) "un-" |
| Negative particle with verbs: | *na*-, *nay*- ( ...ـنـ - ...نیـ ) | *na*-, *nā*-, *nay*- ( ...ـنـ - نا - ... ) "not". |

The fact that all the three nowadays existing forms of the negative are used in K. as prae-verbal particles, as against only two in P., is based on the so current confusion in K. of the harsh short -*a* in terminations with the ordinary long -*ā*, a fact which has already been pointed out in the course of this sketch. This confusion between these two sounds. and, in

consequence, between the negative prae-verbal and prae-adjectival particles, seems to be very old indeed [1].

Other instances of peculiarly K. adverbs and adverbial expressions will be found in the Vocabulary.

## The Preposition

The often occurring confusion between the preposition *ba* ( به ) and *bā* ( با ) has already been pointed out and exemplified in the chapter on Spelling.—

The preposition *dar* ( در ) mostly loses its final *-r* in current speech and becomes *da*[2]: *da sar-i mayz māndum* "I put (it) on the table"; *da dūkān šišta* "he is sitting in (his) shop".—

The vowel in the preposition *bar* ( بر ) undergoes an elision before verbs beginning with a long *ā-*, as has been pointed out in the chapter on Verbs.

The preposition *az* ( از ) is sometimes used instead of the preposition بر of P. .

AA. علاوه از آن = P علاوه بر آن "in addition to it",

sometimes used pleonastically after the preposition *badun* ( بدون ) P "without", K "besides", with which it is then connected by means of an *izāfa*:

*badun-ī az ū* ( بدون از او ) "besides him".[3]

It is also currently used in a similar construction with *barāy-i* ( برای ) "for":

*barāy-i az ū* ( برای از او ) = P. از برای او "for him";

and, in general, it is often used pleonastically in connection with an *izāfa*·

---

[1] I find an instance of this in 'Attār's Tazkiratu-l-Awliya (Persian Historical Text's Series. vol III. Tho Tadhkiratu'l-Awliyā, ed. by R. A. Nicholson, p. 188): هرگز خلافت نا کرده .... .. بود — not to speak of the several cases where it occurs in 'Abdul-Karīm's text: مکث نا کرده p. 21 l. 4; p. 25 l. 16; p. 31 l. 19, اکتفا نا کرده p. 70 l. 5.—

[2] I need hardly mention here that Lorimer, Phonology, p 150 § 36 is wrong in thinking that "perhaps it is a mere distortion of *bah*" (!), but his supposition (ibid.) that this form might have originated on the analogy with the Pashtu ablative-genitive particle *da*, although more plausible, has also to be rejected, as this lightened form occurs likewise in varieties of Persian speech, which happen to be outside the zone of Pashtu influences: cf. for instance Ivanow, Rustic Poetry, 255; id., Persian as Spoken in Birjand, 255.—

[3] For the peculiar use of the preposition *badūn* ( بدون ) "without" in the meaning of "except", see Vocabulary s.v.-

AA. تعبیر از آن (*tābir-i az ān*) = P. تعبیر آن "the explanation of it";

*māl-i az ū* (مال از او) = P. مال او "his";

*xāna-yi az ū* (خانهٔ از او) = P. اوطاق او "his room".

*az* is further used in definitions of time:

AA از چند سال است = P. چند سال قبل "several years ago";

NN. از اوّل ماه شروع = P. از اوّل ماه ببعد "from the 1st of the month".

For the use of the compound adjective *amrā[h]* (همراه) as a preposition v. Vocabulary.—

Another synonym of *bā* (با) "with" is the extremely current *kat-i* (کت) "with":

*kat i ū* or *kat-i az ū* "with him", etc. v. Vocabulary.—

The P. preposition واسهٔ (pop for بواسطهٔ) is not used in K., where its place is taken by the more vulgar *baxš* (بخش) or *baxša* (بخشه), v. Vocabulary.—

Prepositions are occasionally dropped (both in speech and in writing):

AA. که ار آن خبر باشم = P. که از آن با خبر باشم "so that we should be aware of it";

OL. قرار معلوم = P. از قرار معلوم "according to what is known; as is known".—

For the peculiar use of *mā-bayn* (مابین) "between" in the sense of "in, inside of" see Vocabulary.—

## The Conjunction

The disappearance in certain cases of the conjunction *u* (و) "and" has already been mentioned in the chapter on Numerals.—

The causal conjunction in K. is *čūnki* (چونکه), as against P چون "because", and is used extensively and without any real necessity. I should like to think that it is under T. influence that this form has established itself in K. and further found its way into H.—

The disjunctive conjunction is *lākin, laykin* (لاکن - لیکن), as against P. لیکن و (*velīkan*) or the more usual P. امّا "but".—

## Interjections and exclamations

Along with the ordinary interjection *ay* ( ای ) used in hailing, a form *āw* ( ؟ ,هاو ) is also current. As it never occurs in writing, it is difficult to say, whether it is a parallel form for the P. ای (i.e., whether it ought to be spelt او), or a synonym of the P. های [1] The latter, however, is a postposition, whereas the K. word stands before the noun, which it puts in the Vocative, or, in absence of such a noun, begins the sentence. Thus:

*āw baččā* = P ایبچه "boy!"

*āw biya* = P. بیا های "come (quick)!"

A peculiar K exclamation of approval is *halā halā halā* [*xayr bīnī*] (هلا هلا هلا خیر بینی) = P. آفرین "well done!" or "that is right!"—[2]

The exclamation *yā čār yār* ( یا چهار یار ) "O, ye, Four Friends!" is used by workmen (Sunnis, as the majority of the Afghan population) in exhortation at work,—an allusion to the Four First caliphs, where in P. the name or the title of the Commander of the Faithful ( یا علی or یا امیر المؤمنین ) or the title of Imām 'Alī Zaynu-l-'Ābidīn (حضرت امام چهارم) would be used.—

## Polite phrases and terms of abuse

The few polite expressions in K. speech neither cover the usual polite formulæ in P., nor do they coincide with these. It would seem that the evolution of such stereotyped phrases went on in Afghanistan quite independently of the P speech and developed on its own lines Many of the polite P expressions, like فرمودن "to please". تشریف آوردن "to honour (by

---

[1] Steingass, s. v., has a word هاو which he transcribes as *hāv* and explains as "used when charging an enemy". It might be the same word as the K. interjection here discussed.—

[2] The interjection هلا (or, in its lightened form, هله) occurs (poetically) also in P.: one hears it often in Persia in the refrains of certain dervish-songs (mostly ascribed to Shams-i Tabrīzī) like: هی هی هلا ها هو هو (*háy-hay hála-hā hū hū*) or

طوبی هله طوبی هله طوبی هله طوبیٰ * روحاً هله روحاً هله روحاً هله روحا

*ṭūban hala ṭūban hala ṭūban hala ṭūbā* *rūḥan hala rūhan hala rūhan hala rūḥā.*—cf. also Ivanow, Persian as spoken in Birjand, No 18 (p. 274), l. 1: "*Helo hay*", ll. 3–4 "*hālo ho*"; No. 42 (p 284) l. 1: "Alo"; No. 44 (p 285), No 45, No 46, l 1: "*Halo*", etc.

coming, by calling)", شرفیاب شدن "to seek honour (by calling), to call" (when speaking about oneself); چشم (lit. "eye", i.e. "as precious as my own eyes") "I deem it a duty!"; بندہ "(your) slave", and many others, are not only entirely missing, but there is even no trace of any adequate equivalent for them in K.

The terms of affirmation and confirmation are extremely sober in K., and some of them look very much like mere translations from E.:

*bálī sāib* ( بلی صاحب )[1] "yes, Sir!"
*bisyār xūb sāib* ( بسیار خوب صاحب ) "very well, Sir!"
*bisyār durust* ( بسیار درست ) = P. درست - صحیح "correct!"
*bisyār ālā* ( بسیار اعلی ) = P. بارک الله "that's fine!"
*bisyār mērbānī* ( بسیار مهربانی ) = P. مرحمت شما زیاد or التفات شما زیاد "very kind (of you)!" (lit "much kindness").

The word *sāib* is generally used in K. both for "Sir" and "Mr.", where in P the term آقا is applied:[2].

وزیر صاحب خارجه = P. آقای وزیر امور خارجه "the Minister of Foreign Affairs";
وزیر صاحب مختار = P. آقای وزیر مختار "the Minister Plenipotentiary" —

The word *sāib* is placed after the name or the title of the person addressed (or mentioned) and, as can be seen from these examples, in titles of a composite nature, after the first link of such a compound. Should that word ever be used in that sense in P., it could naturally never be placed in the middle of a compound thus rending asunder a logical complex.—

Other formulæ of assent, besides the above cited, are:

*dilat* ( دلت ) = P. میلتان "as you like" or "please yourself" (lit. "thy heart", i.e. "as thy heart wisheth!") —

*azār dafa* ( هزار دفعه ) "a thousand times!" (i.e. "with pleasure") is the nearest equivalent of the P. چشم.—

A polite term of denial is:

---

[1] It is even used when addressing the King.—

[2] In P. صاحب means "master; owner", and is less used as a form of address.—

*xudā mēdāna* ( خدا میداند ) = P. چه عرض کنم "I do'nt know" (lit. "God knows").—

A formula of acceptance of a proposal is:

*agar mērbānī bāša* ( اگر مہربانی باشد ) = P. اگر مرحمت بفرمائید or اگر التفات بفرمائید "if you are so kind".—

The nearest attempt at constructing a polite sentence on the pattern of the formulæ current in P. is the seldom heard phrase of civil invitation to come in.

*taklīf*[1] *guwārā kunīn* ( تکلیف گوارا کنید ) = P. بفرمائید "please, take the trouble" (lit. "make the trouble palatable").—More often, however, the invitation to step in is expressed in one word by the Imperative of the verb آمدن:

*bi'āyīn* ( بیآئید ) "come!"--

The simplest phrase of greeting (after the Islamic formula of salutation has been exchanged) is:

*tabī'at*[2] *xūb*? ( طبیعت خوب ؟ ) = P. حالتان خوبست "how do you do?" (lit. "health good?").—

The answer to that query is:

*šukur* ( شکر ) = P. الحمد لله "thank (God)!"

Generally, however,—more especially after a parting or when greeting a new arrival—more elaborate formulæ are used, like:

*xūbastī jūrastī baxayrastī xūb jūrastī xūb baxayrastī jūr-xu astī xayr-xu astī mānda nabāšī salāmat bāšī tabī'at xūbas*

خوب هستی جور هستی بخیر هستی خوب جور هستی خوب بخیر هستی

جور خود هستی خیر خود هستی مانده نباشی سلامت باشی طبیعت خوبست ؟

i.e. lit.: "art thou well? art thou fit? art thou all right? art thou quite fit? art thou quite all right? thou lookest fit! thou lookest all right! (I hope) thou art not tired? good cheer to thee! Is thy health well?"—

This string of questions is repeated in a rapid recitative.

In reply, the same gibble-gabble may be poured forth all over again, or the mere word *šukur* ( شکر ), already recorded may be used —

An intimate friend might be greeted on arrival by the formula:

*qadamatān mubārak čašmatān rawšan šānayitān dirāz* ....
( قدمتان مبارک چشمتان روشن شانهٔ تان دراز ) "Your feet (be)

---

[1] For the meaning of *taklīf* ( تکلیف ) see Vocabulary.—

[2] For the meaning of *tabī'at* v. Vocabulary.—

lucky! your eyes (be) bright! your shoulders (lit "shoulder-blade") (be) broad (lit. "long")! ...... !" [1].

A jocular form of greeting of a rather coarse nature between very intimate friends may be sometimes heard:

*bi-pūndī bi-tarakī kamarat bi-škanad tu kūr šawī* ( بپوندي بترکي کمرت بشکند تو کور شوي ) "Mayest thou swell! mayest thou burst! may thy loins break! mayest thou become blind!" This antiphrastical sentence is probably meant to avert the evil eye or something of the kind

The formula of taking leave is:

*ma ruxsat ?* ( من رخصت ) = P. بنده را مرخّص میفرمائید or بنده باید مرخّص شوم "(am) I allowed (to leave)?"—

At parting either the Islamic formula of salutation is pronounced (which is not customary in P.), or else the guest, who is going, says:

*ba-amān-i xudā* ( باماں خدا ) or *fī amāni-llāh* ( في امان الله ) "to the protection of God (I entrust thee)!", to which the master of the house replies:

*ba-xudā supurdum* ( بخدا سپردم ) "I entrust (thee) to God!"—

I have heard, however, the sequence of these two formulæ reversed.

The forms of congratulation differ little from those current in P. (i.e. چشمتان روشن - انشاء الله مبارکست - مبارك باشد , although the first two appear mostly in the laconic shape of the one word *mubārak* "lucky!"), the reply. however, instead of the more elaborate phrases current in P., is merely the brief: *salāmat* ( سلامت ) "cheer!"

A somewhat more complex sentence is used for congratulation on the *'Īdu-l-aẓḥā* ( "The Feast of Sacrifice" ) [2] commonly called by the Afghans *'Īd* [3] "The Feast":

*īditān mubārak namāz-[4]-rūza-tān qabūl dāxil-i ḥājiyā γāziyā* ( عید تان مبارك نماز [ و ] روزه تان قبول داخل حاجیان غازیان ) "(May) your Feast be lucky! (may) your prayer (and) fast be accepted! (may you) enter (the confraternity of) the pilgrims

---

[1] The rest of the formula is unprintable —

[2] On the 10th of Ẕū-l-Ḥijja.—Called by the Persians *'Id-i qurbān*.—

[3] In P. the term *'Id* ( عید ) is the abbreviation of عید نوروز "The Festival of the New Year", and is not applied to other festivals without some special qualificative, unless, of course, when loosely used in the general sense of "holiday" —

[4] With the omission of the conjunction, v. supra, p. 41.

(and) champions of the faith!" The reply to it is the usual *salāmat* ( سلامت ) "cheer!" as above.—

The terms of abuse in K. are so coarse that I am able to cite only very few of them. One thing of general importance must be, however, mentioned, namely, that what has been said with regard to the above discussed polite phrases holds good also for the terms of invective current in K.: they do not coincide with the similar terms in use among Persians, and many of the P. terms of that kind have no exact equivalents in K. and vice-versâ. Thus, for instance, the expression بدر سوخته "one whose father has been burned"[1], so current in P., is altogether unknown in K. As its nearest equivalent might be suggested the K.:

*padar-nālāt* (with a transposition of the syllables of the second link of the compound, instead of بدر لعنت), pronounced often in rapid speech in the heat of an altercation as *pālāt*, whatever its meaning[2]. This expression, on the other hand, is entirely foreign to P.[3]

Nor does one hear in K. the so current P. terms of invective بدر سگ - بدر فعده - مادر - جاكش - فوراصاق etc. The P. نا مرد (lit "unmanly") appears in K. in the softened form of a diminutive:

*nā mardak*[4].

The P دیّوث "contented cuckold" appears in K. in the slightly mutilated form *dawūs*[5].

Where in P the verb ریدن "cacare" is used in invective in combination with the words ریش "beard", سر "head", کلّه "skull" قبر "grave", etc., K. uses the composite verb *guh kardan*, and the current expression (heard almost exclusively from the lips of the fair sex) is:

---

[1] That expression was obviously coined by the troops of Nādir-Shāh during the latter's Indian campaign (1737–39), when the Persians met with the—from their point of view—horrid proceeding of burning the corpses of the dead.—

[2] It might mean "one cursed by his own father", or (and more probably) "one whose father be accursed".—

[3] The word لعنت in P. is, to my knowledge, used in current colloquial only in two combinations: (1) when abusing some absent person خدا لعنتش کند "may God curse him!" (2) as a kind of oath in the expression بردروغ گو لعنت "on the liar be curse!", i.e "may I be damned, if I am lying!"—

[4] v. Vocabulary, s v.

[5] v. Vocabulary.—

*da dānat guh mēkunum* (در دهنت گه میکنم)[1].

Passing under silence other K. terms of abuse, I may in conclusion say a few words about the more current polite turns of phrase as used in writing (OL)

These also are widely different from the P. forms used in correspondence and do not in any way cover the latter.

A letter in K either begins e x a b r u p t o, or (in unofficial and semi-official instances) it is introduced by some kind of summary address like : اند وست عزيز من - دوست عزيزم "My dear friend !"[2]

The beginning of an official letter is :

با كمال احترام باستحضار . ميرساند =P. شرف اطلاعدهي[3] دارد "has the honour to inform "[4].—

The concluding phrase of a letter in K is always very brief :

در خاتمه احترام "in conclusion—respect", or

با احترامات لازمه "with the necessary (!) respects ", or

احترامات لازمه را بپذيريد "accept the necessary respects".—

I abstain here for considerations of space from citing any possible P equivalents for these sentences, but may mention that these abrupt phrases are essentially un-Persian and seem to have been constructed on the pattern of the sober E. terminations of letters It may be also noted that such phrases are only found in Afghan official letters addressed to foreigners The usual formula of concluding an official letter amongst the Afghans themselves is the word فقط "only"[5].

The P. formulæ for the termination of letters: زياده زحمت; '(to say) more (would be to) trouble", and زياده زحمت نميدهد "I won't give you any more trouble", not to speak of the more elaborate concluding phrases, seem to be entirely unknown in K.

---

[1] The verb كردن ought probably to be disconnected here from the noun and not considered as auxiliary, but rather as an independent active verb, meaning "to put", so that the whole sentence might be freely translated as · "I f i l l thy mouth with excrements !"—

[2] Possibly a recent importation from E. The obligatory P. formulæ (not to speak of their proper gradation, so very much observed in Persia): - تصدّقت گردم - قربانت شوم - روحي فداك - فدايت شوم —are altogether unknown in K.—

[3] v. Vocabulary.—

[4] Looks to me suspiciously like a recent borrowing from E.—.

[5] Obviously a translation of the E "only", as used on cheques, receipts, etc., after sums mentioned therein.

II.

The Vocabulary presented here contains a number of Kābuli[1] words currently used by the Persian speaking population of the cities of Afghanistan. Taking into consideration that, in most cases, in the instance of local varieties of speech (sometimes loosely called dialects and confused with the latter) the recorded texts and the resulting grammatical and lexicographical materials are derived from the speech of the illiterate (peasants, nomads, etc.) class of the population, —I wish to emphasize the point that the contents of the Vocabulary which follows and of the Introductory notes of the present sketch are aiming at recording the speech of the literate part of the Afghan population, the "court language of Kabul", to which Maj. Lorimer refers in his "Phonology"[2], and has practically nothing to do with the language of the illiterate. In other words, I am dealing here with the official language of Afghanistan, not with some rare idiom of some out-of-the-way village or nomad-tribe.

The language (or local speech) in question differs so much from standard Persian[3], that I cannot in any way share the point of view of Sir George A. Grierson who says, when speaking of Badakhshānī, that "as Persian is so well known, it is unnecessary to give a detailed account of the language used in them", (i.e., the specimens of Badakhshānī given by him), mentioning further that "the Persian spoken in Afghanistan closely resembles Badakhshī."[4] Were that view correct, the present article would have remained unwritten[5]. As it is, however, I flatter myself with the thought of having presented to the reader some entirely new materials in the domain of Persian dialectology

For conciseness' sake I have applied to the subject of this sketch the term Kābuli and I have everywhere referred to the Tājīkī of Bukhara as Tājīkī. If we take, however, into consideration that the term Tājīkī has a general definite meaning of all kinds of varieties of Persian spoken by non-Persians, it might perhaps have been more correct to refer to the Persian of Afghanistan as "the Tājīkī of Kabul", as opposed to or compared with the "Tājīkī of Bukhara",

---

[1] V Introduction, p 2.

[2] p 129 —

[3] I mean by Standard Persian (abbr. everywhere P.) the present-day colloquial language of Tehran —

[4] Linguistic Survey of India, vol. X. p. 527.—

[5] Cf. for instance, also Browne, 'A year amongst the Persians' p. 112: "Amongst the visitors were a certain number of Afghans......On these occasions I used often to remain in the room during the conversation, *half of which, although it was conducted in Persian, was really unintelligible to me, for the Afghans speak in a manner and with an accent quite peculiar to themselves*".—

which Geiger[1] so appropriately calls "eine locale Entartung der Schriftsprache". A similar "locally decayed" variety of Persian is also the language of Afghanistan. More than that, I maintain that these two languages are essentially and originally identical and that any differentiation of these two languages must have occurred at a quite recent epoch. We may take it that, roughly speaking up to the rise of the Barakzay dynasty (1826) there has never been any actual isolation of Afghanistan from the rest of the vast tract of land between Samarqand and Bukhara, on one side, and Kashmir and the Punjab, on the other (including, besides Afghanistan, Khiva, Khoqand, Kashghar, Khorasan and Seistan), and that the Persian language used throughout the whole expanse of that area must have been more or less uniform.

If we judge by the texts of the histories of Muḥammad Amīn Bukhārī[2] and 'Abdul Karīm Bukhārī[3], who wrote respectively in the second half of the XVIIIth and at the beginning of the XIXth century, we can see that the language of these two texts is essentially the same as the present-day language of Afghanistan,[4] making allowance for the influences that have been at play during the last hundred years.

The actual isolation of Afghanistan, as has been said, begins with the second quarter of the XIX century, and we may take that henceforward and up to 1919 the possible influence of literary Persian and P. on the language used in Afghanistan is extremely weakened, the influence of the Persian of Turkestan (Tājīkī) must have stopped from that moment altogether, and of all outside influences perhaps only that of Hindustani could have been at play, although certainly considerably weakened, as compared with the preceding

---

[1] Grdr. d. iran. Phil., vol I, p. 407 —

[2] Teufel, o.c. The work of Muḥammad Amīn is the individual history of the reign of 'Ubaydullāh Khan II of the Jānīd dynasty (1751–1753 A D.) —

[3] Schefer, o.c. The History of 'Abdul-Karīm comprises events which took place in Afghanistan, Bukhara, Khiva, and Khoqand for the period from 1740 to 1818 A.D.

[4] A few days before my departure from Kabul early in November 1927, His Highness Sayyid 'Ālim Khan, the ex-Amīr of Bukhārā, honoured me by lending me for perusal a manuscript of his autobiography entitled حزن الملل بخارا, just completed by him at that moment. As the manuscript was to be sent a few days later to Paris for translation and publication, and I myself was extremely busy with getting ready for my journey, I was unable to avail myself fully of that unique opportunity of comparing my notes on Kābulī with the language of the manuscript in question. A cursory perusal of its contents showed me, however, the correctness of my conjecture of the close relationship existing between K. and the Tājīkī of Bukhārā: barring a few deviations and local peculiarities, the language of the Ms. was to all purposes the same as that of K. books and documents that had come to my notice.

centuries. So that, for the last century, Afghanistan, as regards its language, was to all purposes left to its own resources. During that last century, however, the standard colloquial of Persia completed a considerable evolution culminating in its final present day's expression, which is known in Afghanistan and in the far-away Caspian provinces[1] of Persia, as Qājārī from the dynasty of that name

As already mentioned[2], there is no strict distinction in Afghanistan between the colloquial and the literary language, as there is no literature in Afghanistan to speak of. I have, therefore, compared in the Vocabulary that follows the K. words with their equivalents in Modern Colloquial (standard) Persian, giving always[3] first the P equivalent and then the English meaning of the K word. The P. equivalents introduced here have all been carefully checked by me with my Persian friends in Kabul[4], who often even gave me K. words heard (or seen in writing) by them, which were then naturally verified by me through my Afghan acquaintances, before being incorporated in my stock of K. words

I hope, therefore, that any possible mistake in that direction has thus been very much minimized.

The Vocabulary contains about eight hundred and fifty K words[5], which are given in transcription in Latin characters To express چ is used *č*, for خ is used *x*. for ژ is used *ž*, for ش is used *š*, for غ is used the Greek *γ*. No difference is made between ح and ه both expressed by *h*, nor between

---

[1] I heard on my arrival in Afghanistan in 1923 my own Persian referred to as "Qājārī" by the natives ("*Qājārī gap mēzanīn*") and this also happened to me repeatedly in Gīlān and Māzandarān in 1914–1915. I cannot say whether standard Persian bears that name in other out-of-the-way provinces of Persia, but it is more than probable, as the Persians themselves are keenly aware of the local peculiarities of speech, so often derided by the inhabitants of the capital and the adjoining districts.—

[2] v Introduction, p 2

[3] A score of words or so had to remain without P. equivalents, as I did not know them myself and was in one way or another prevented from finding them out. I shall feel greatly obliged to my fellow-workers in the domain of Persian who will make any suggestions with regard to the same (either by letter or in articles published by them).

[4] Members of the Persian Legation and the Persian teachers attached to the Amānīyya School of Kabul, more especially Mr. A. H. Ardjmand (whose work I had already occasion to mention in my article on "The Afghan Weights and Measures" J.A.S.B., 1928), whose unremitting help in the checking of the P. equivalents of my Vocabulary has been invaluable to me.

[5] The number of words in the Vocabulary might have probably been slightly increased by careful perusal of all the Afghan printed books and periodicals in my possession, but that would have considerably delayed the publication of the present sketch. I, therefore, contented myself with the number of words across which I had come in actual life during my four years' stay at Kabul.—

ظ - ض - ز - ذ all of them expressed by *z*, nor between س and ص both expressed by simple *s*, nor between ت and ط for which there stands everywhere a simple *t*. In brackets, the same word is repeated in Arabic characters. The P. words are given only in A. characters, except in cases where the word in K. and P. is identical, but merely differently pronounced.

Wherever possible, examples of sentences or expressions, in which the word occurs, have been given under the respective heading and the origin of such a sentence has been marked, as mentioned in the Introduction [1].

The text of the history of 'Abdul-Karīm [2] and the part of the history of Muḥammad Amīn accessible to me [3] have been carefully perused and all peculiarities in the language of the same (Tājikī) coinciding with those noticed by me in Kābulī have been recorded under the corresponding headings in the Vocabulary.

---

[1] p 2 [2] Schefer's edition.—

[3] In Teufel's above quoted article.—Unfortunately W. Grigoriev's edition of the text of Mīrzā Shams Bukhārī, which contains the most complete exposition of the grammatical and lexical peculiarities of the Tājīkī of Bukhara has been inaccessible to me here in India. Nor was I able, for the same reasons, to peruse Senkovski's extract form Yūsuf Balkhī's *Tagkırat-i Muqīmkhānī*.—

# VOCABULARY.

## Abbreviations

*A.* =Arabic[1]
*A.A* =Amān-i Afghān
*AI.* =Anglo-Indian
*Aw* =Awestan
*Bianchi* =J. D. Kieffer and T. X. Bianchi. Dictionnaire Turc-Français, etc. Paris. 1835–37.
*BrDial.* =E. G. Browne. Some Notes on the Poetry of the Persian Dialects JRAS, 1895
*BrYear.* =E G Browne. A Year Amongst the Persians London. 1893
*C* =The Afghan Custom Regulations
*E* =English
*F* =French
*Fallon.* =A New Hindustani-English Dictionary, etc., by S. W. Fallon. Benares. 1879.
*Geig* =W. Geiger. Kleinere Dialekte and Dialektgruppen (Grdr. d. iran. Phil 1 2 pp. 287 423).
*H.* =Hindustani [2]
*Hobson-Jobson* =Hobson-Jobson. A Glossary of Colloquial Anglo-Indian words, etc, by H Yule and A. C Burnell, London 1903.
*Horn* =P Horn Neupersische Schriftsprache (Grdr. d. iran. Phil. I. 2. pp 1–200)
*HoutSch.* =A. Houtum-Schindler. Beitrage zum kurdischen Wortschatze ZDMG, XXXVIII, 1884.
*IvBirj* =W Ivanow Persian as spoken in Birjand JASB, XXIV, 1928.
*IvKurd.* =W Ivanow. Notes on Khorasani Kurdish. JASB, XXIII, 1927.
*IvRust.* =W Ivanow. Rustic Poetry in the Dialect of Khorasan. JASB, XXI, 1925.
*IvTab.* =W. Ivanow. Tabaqat of Ansari in the Old Language of Herat. JRAS. 1923.
*K.* =Kābulī
*LorPhon* =D. L R Lorimer. The Phonology of the Bakhtiari, Badakhshani, and Madaglashti Dialects of Modern Persian With Vocabularies. RAS Prize Publication Fund. 1922 [3].
*LorPsht.* =D. L. R. Lorimer. Pashtu Part I. Oxford. 1915.
*LSI.* =Linguistic Survey of India.
*MorgFront.* =G. Morgenstierne. Indo-Iranian Frontier Languages I, Parachi and Ormuri. Oslo. 1929.

---

[1] Arabic words current in K. or P are n o t specially marked as such in the Vocabulary, and the mark A. is used only when, for the sake of comparison, some originally Arabic form is quoted.—

[2] The mark H. in the Vocabulary does not necessarily imply that the word is Indian in its origin : it merely means that it is Indian in its use, that is to say, that the word so marked (very often a Persian one, but obsolete) occurs no more in P , but is found in that form in Hindustani from which it might have been borrowed into K.or (more probably) vice-versâ.—

[3] Only the "Badakhshani and Madaglashti" part of it has been taken into consideration in the course of the present sketch.—

*MorgRep.* =G. Morgenstierne. Report on a Linguistic Mission to Afghanistan. Oslo 1926

*MorgShugh.* =G Morgenstierne Notes on Shughni Norsk Tidsskrift for Sprogvidenskap. Bind I 1928

*MorgTexts* =G Morgenstierne. Persian Texts from Afghanistan. Ex Actorum Orientalium volumine VI excerptum.

*MorgVoc* =G Morgenstierne. An Etymological Vocabulary of Pashto Oslo. 1927.

*MP.* =Middle Persian.

*obs* =obsolete.

*P* =Standard Colloquial Persian.

*Päz* =Pāzand.

*Phillott* =D. C Phillott Colloquial English-Persian Dictionary, etc. Calcutta 1914

*Platts* =John T. Platts. A Dictionary of Urdū, Classical Hindī, and English. London 1911.

*Port.* =Portuguese.

*Psht* =Pashtu[1]

*R* =Russian[1].

*Raverty* =H G Raverty A Dictionary of the Pukhto, Pushto or Language of the Afghans, etc, London, 1867.

*Salemann* =C Salemann Mittelpersisch (Grdr. d iran. Phil I. 1. pp. 249–332).

*Socin* =A Socin. Die Sprache d. Kurden (Grdr. d. iranischen Phil I. 2. pp. 249–286).

*Skr* =Sanskrit

*Steingass* =F. Steingass. A Comprehensive Persian-English Dictionary, etc., London

*T.* =Turkish[1]

*T.* (with a figure after it)=F. Teufel. Quellenstudien zur neueren Geschichte der Chānāte ZDMG, XXXVIII, 1884.

*Tāj.* =The Tajikī of Bukhārā

*v.* =vide, see

*Vaughan* =Vaughan A Grammar and Vocabulary of the Pushtu Language Calcutta. 1901

*vulg.* =vulgar

---

[1] These marks are not meant to imply that the word so designated is necessarily Turkish, or Pashtu, or Russian, etc.—they merely indicate in which language the K. word occurs in the same or similar meaning or form.

## Vocabulary

### A

*aban wa jaddan* ( ابا و جداً ) = P. ابا عن جدّ (*abā 'an jadd*) from generation to generation —cf. also آبا و اجداد T. 328 l 29; 371 l. 7. 'Abdul-Karīm has several instances of analogous expressions :—

عن اباء اجداد مال مسلمانها را بعما و تاراج میکردند p. 82 l 14

*adrak* ( ادرک ) H. = P. زنجفیل - زنجبیل ginger —of Skr. *ārdraka*. But 'Abdul-Karīm p. 4 l. 15 has زنجبیل.—

*afsar* ( افسر ) E. = P. صاحب منصب military officer.—A curious kind of popular etymology is felt in this word, probably connected in the thought of the population with P. افسر "crown".—

*aftāndan, aftīdan* ( افتاندن - افتیدن ) = P. افتادن (*uftādan*) to fall.—

*aftīdan* v the preceding: *aftīdum da daryā* ( افتیدم در دریا ) "I fell into the river". -cf. also IvBirj. No. 129 p. 305 "*eftidayum*".—

cf. also Dīvān-i Shams-i Tabrīzī (Nawal Kishore edition) p 202 l. 4: ( ور شاخ درخت تو چنین خام فتیدیم ).

*afyūn* ( افیون ) H. = P. تریاک opium · AA مسئلهٔ مهلک افیون "the question of the dangers of opium" (lit. "the dangerous question of opium"). The word is obsolete in P. It must have been borrowed from Greek ὄπιον by the Arabs, was introduced by them into Persian, and came thence into H., where the word can hardly be directly derived from Skr. *aphēna*, as dictionaries would like us to believe.—
cf. also 'Abdul-Karīm p. 28 l. 10: از نشئهٔ افیون بهرهٔ داشت "he was under the influence of the opium-drug".

*aylaban* (AA. اغلباً ) = P. اغلب or غالباً mostly.—

*ajant* (AA. اجنت ) E. = P. آگنت R. agent (of a commercial firm, a bank, etc.). Not to be confused with the P. آژان F. which means "a policeman".—

*alaktrīkī* ( الکتریکی ) = P. برقی electric :—چراغ الکتریکی = P. چراغ برقی electric lamp".—

*alāwatan* (OL. علاوةً ) = P. علاوه بر این or بر علاوه besides; in addition to it.—v. Adverbs in the Introduction.—

*alāyda* ( علیعده ) = P. علیحده (*'alāḥida*, vulg. also *alāḥidda*); i.e. *alāhida* > *alā'ida* > *alāyda* v. chapter on "Pronunciation" in the Introduction. cf. LorPhon. p. 167 (in the specimen-texts, but omitted in his vocabulary): B. *aloi.id*; cf. also MorgFront. 233a, where a case of an extraordinary spelling الاهدی (*sic*) is recorded.

*aliqīn* (؟............) E. = P. فانوس lantern.—From the E. "hurricane [-lantern]", but probably connected in popular thought with A. علیق "suspended; hanging". Hence the hard *-q-* sound.

*altāyī* ( C. التائی ) T = P. روباه سیاه black fox (skin).—

*alwān* ( الوان ) = P. ململ chintz; calico: *alwān-i surx* (C.) "red chintz".—

*alwārī* ( الواری ) } = P دولابچه wardrobe; cupboard. From H.
*anwārī* ( انواری ) }
*almārī* "almyrah", cf Hobson-Jobson, s v.

*ama waqla* ( همه وقته ) = P. متصل—متداول continually.—

*ambür* ( امبور ) = P. گاز nippers, pincers. cf. *ātašgīr* and *palā*s.—

*amči* (AA همچه ) = P. همچنین such, suchlike.—

*amman qarīb* (AA. عمّا قریب ) = P. عنقریب (*'anqarīb*) approximately —

*amrā[h]-i* ( همراه ) = P. با with:

AA قرار داد شرکت المان همراه افغانستان "the agreement of the German Company with Afghanistan." Even *amrā[h]-i bā* in the same meaning: *amrā[h]-i bā pansil binawīs* "write with a pencil!"— Synonym *kat-i*, q v.

*anarjī* ( انرجی ) E. or F. = P. حد و جهد energy: AA. قهر و انرجی او "his authority and energy".—

*andīwalī* ( اندیوالی ) = P. شراکت or مشارکت partnership; messing together.—From Psht اندیوالی, which seems to be a corruption of P. همدیواری "neighbourship" (lit. "sharing the same wall"). Constructed with the verb انداختن: *andīwālī andāxtan* ( اندیوالی انداختن ) = P. شریک شدن "to become partners; to start messing together". cf. also Morg. Front. 234b.

*angāštan* ( انگاشتن ) obs. = P. محسوب کردن to think; to consider; to estimate.—

*antrīg* ( انتریگ ) E. =P. فتنه intrigue.—

*anwārī* v. *alwārī*.

*apran, apram* ( ابرن - ابرم ) E. =P. پیش بند apron.—

*aprīl* ( ابریل ) E. =P. اوریل F. April.—

*aprīš* (AA. اپریش ) } E. =P. عمل جرّاحی - عمل دست - عمل operation
*aprīšan* ( ابریشن ) } (surgical).—

*apt* ( هفت ) =P. هفت (*haft*) seven

*apda* ( هفده ) =P. هفده (*hivdah*, thus in spite of Steingass' "*hafdah*" q.v.) seventeen —

*aptāt* ( هفتاد ) =P. هفتاد (*haftād*) seventy.

*ar* ( هر ) used with a negation =P. هیچ no; none: AA. و در هر موقع از بذل شفقت مادرانهٔ خویش خودداری نکرده اند "and on no occasion has she (the Queen) abstained from showing her motherly kindness".

*arākīn* ( AA اراکین ) =P. ارکان chiefs, grandees —The word is an A. broken-plural form from its P equivalent which in itself is a plural from A. رکن "pillar".—

*arbāb* ( ارباب ) =P. کد خدا chief of village —cf. also *qaryadār*.

In P. ارباب (plur. fr. A. ربّ "lord") means "master" and with regard to a village "the owner; a landowner, a squire".—

*arča* (?......) =P......? a kind of tree and wood similar to the plane. W. Ivanow was so kind as to suggest (by letter) that it might be a provincial pronunciation of the word الوچه "plum-tree", which he himself has often heard thus called in Khorasan. That cannot, however, be thought of here, as the planks of that tree (which were said to be brought from Badakhshan) were about 12–14 ins. wide and were used for carpenter work —

*ar dūš, ar dūyišān* ( هر دوش—هر دوشان ) =P. هر دوناش - هر دوناشان both of them.—

*arhat* ( ارهت ) =P. چاه a well.—Borrowed from Psht. ارهټ *arhatt* "a well with a Persian wheel for drawing water" (Raverty).

*askar* ( عسکر ) T. =P. سرباز soldier.—The word is chiefly used by Turkish speaking peoples and is obsolete in P. It occurs many times in 'Abdul-Karīm's text: p. 14 l. 15; p. 16 l. 19; p. 18 ll. 10, 11; p. 20 ll. 6, 9, 15, 17, 22; p. 24 ll. 2, 15; p. 26 l. 13, etc. I find it only once in Teufel,

and that as a part of a compound-title: قاضی عسکر p. 347 l. 12-13 (note).

*aspār* ( اسپار ) = P. گاو آهن a plough.—Whether meaning "horse-propelled"?

*ašt* ( هشت ) = P هشت (*hašt*) eight.—

*aštād* ( هشتاد ) = P. هشتاد (*haštād*) eighty —

*ažda* ( هژده ) = P. هجده - هژده (*hiždah—hijdah* in spite of Steingass' "*hajdah*" and "*hazhdah*", q.v.).—

*atan* ( اتن ) Psht. = P. رقص dance.—From Psht اتنړ v. Raverty, s.v.

*atīq* ( عتیق ) } = P. قدیم old: NN. رتبه‌های جدیده و عتیقهٔ عسکری
*atīqa* ( عتیقه ) }

"the new and the old military ranks";

AA عتیقه خیال = P قدیمی خیال "old-minded; conservative".—

The word means in A. "free; noble; of old (i.e. noble) descent; thoroughbred (of horses); old (i.e. "venerable": بیت العتیق "the old house", i.e. "the temple of Mecca"), but is never used in P. as an antonym of 'new" in the ordinary sense of the word.—

*atīqajāt* (عتیقه‌جات) = P آثار قدیمه antiquities.—Plural of the preceding I have never heard that A. word used colloquially in Persia in that sense. The somewhat similar in sound and meaning P. انتیک (F "antique") is also never used in its original F. sense, but means only "fine, elegant, stylish", etc

*aw* ( هو - هاو ؟ ) = P. های - ای ahoy! oh! ·

*aw biyā* = P. بیا های "come!" (when calling a servant);

*aw bača* = P. rather in plural بچه‌ها (unless the same های is concealed here) "boy!"—

*awābāz* ( هوا باز ) = P. هوا پیما airman.—Of recent formation on the pattern of *āwbāz* q.v.

*awāxurī* ( هوا خوری ) = P. گردش outing; going for a walk.—Probably under the influence of H.

*awgār* ( افگار ) = P. اذیت—زخم hurt; wound. cf. also I vT a b. 373.

*azārdāfa* ( هزار دفعه ) = P. چشم with pleasure; certainly. v. Introduction, p. 43.

*az pēš raftan* ( از پیش رفتن ) = P. پیشرفت کردن to advance, to prosper :
AA. کار اوشان از پیش می نرود (*kār-i ūšān az pēš mīnarawa*) "their affairs do not prosper".—

*ābād* ( آباد ) = P. چاق well-fed : AA گاو و مرکب را آباد و فربه نگاهداشته "keeping the cows and asses well fed and fat".— I find in 'Abdul-Karīm's text: سنگ آباد = "precious stone" p. 36 l. 2 —In P. آباد means only "cultivated; well-ordered" (of land, gardens, cities, etc.)—

*ādam* ( آدم ) = P. شخص - مرد man ; person : *kudām ādam āmada* = P. یک شخصی آمده 'a person has come". Although the word is known and sometimes used (in the meaning of "servant", "employee": آدم مشیر الدله "a servant of M.-D.") in P. not only as the name of the biblical Adam, still its use is not current in P. in the general sense of "man".—The word must have been introduced in K. under some foreign, probably T., influence, seemingly in earlier times, as we find it in H. as well.

*āftāwras*, *āwtāwras* ( آفتاب رس ) = P. طلوع آفتاب sunrise. cf. also LorPhon. pp 174a, 190a.

*āgest* ( آگست ) E. = P. اوت (F.) August.

*āhīn* ( آهین ) = P. آهن iron. For the ī cf. Salemann p 264 § 23 ; Socin p 258 § 31 ; also HoutSch. p. 48.

*āliš* ( آلش ) T = P. عوض - معاوضه - مبادله exchange, barter. Constructed with کردن —

*āmadāt* ( آمدات ) = P. پیش آمدها happenings : OL. که اینطور آمدات دیگر پیش نیاید "so that such happenings should not occur again".—

*ānā* ( اعنی ) = P یعنی (*ya'nī*) that is to say ; i e.—Though good A. in itself, this form of the word is never used in P.—

*āsta* ( آهسته ) = P. یواش (more seldom) آهسته (*āhista*) slowly ; gently.—Occurs in 'Abdul-Karīm's text p. 109 l 10.

*āstriyā* ( استریا ) E. = P آتریش (F.) Austria.—

*āt* ( عهد ) = P. عهد (*'ahd*) agreement.—cf. also *šāt*, *ostāt*, etc.—

*ātašgīr* ( آتشگیر ) = P. انبور tongs of. *ambūr*.—

*ātī* ( آتی ) = P. ذیل the following. In P. آتی means only "future, to come".—Very current in AA., MA., OL., etc.—

**āwāl dādan** ( احوال دادن ) = P. اطّلاع دادن - خبر دادن to inform.—

**āwbāz** ( آب باز ) = P شناگر - شنوگر swimmer.—

**āwbāzī** ( آب بازی ) = P. شنا - شنو swimming.—

**āwraw** ( آب رو ) = P. آب جوی a stream, a ditch (with water) cf. IvRust. 256.—

**āwrīz** ( آبریز ) = P. مبال (vulg. مبال) - مستراح latrine, lavatory.—

**āwtāwras** v. *āftāwras*.

**āyīna** ( آئینه ) = P. شیشهٔ پنجره window-pane.—In P. آئینه means only "mirror, looking-glass".—Yet even in K. "a glazier" is called *šišabur* ( شیشه بر ), as in P.—

**āyīna-xāna** (آئینه خانه) means in K. "a glass-veranda", whereas in P. the same word is used to denote a room with walls and ceiling consisting of mirrors (Germ "Spiegelzimmer").—

## B

**bábar** ( ببر ) = P شیر (*šīr*) lion.—In P. ببر (*babr*) means "tiger" —

**baċċa** ( بچه ) = P. پسر son:

OL غلام احمد خان بچّهٔ سپهسالار "Ghulām-Ahmad Khan, the son of the Commander-in-Chief".—

Also in Tāj. 'Abdul-Karīm has got p. 68 l 16 زن و بچهای عمر بی (Schefer, translation p. 155:) "la femme et les enfants d'Omer Bi";—p. 70 l. 8 زن و بچهای آنها را (Schefer translates p 158 and, I think, wrongly) "les femmes et les enfants *en bas âge*".—

**badraqa** ( بدرقه ) = P. قراسوران escort:

*mā imsāl bā badraqa āmadīm* "we travelled this year with an escort".—In Tājikī بدرقه seems to have rather the sense of "banishment, deportation". Thus in 'Abdul-Karīm's text: از بخارا بدرقه کرد p 63 l. 11 "he banished him from Bukhara" (Schefer p. 144: "celui-ci l'exila de Bokhara"); p. 101 l 19/20 با اینکه از ملک بدرقه کنی (Schefer, translation, p. 227) "exile-le".—

The word *badraqa* is, however, used in P. only in the sense of "seeing off; accompanying (a friend for the first stage of a journey)", cf., for instance, BrYear 158.—

**bagī** ( بگی ) H. = P. دو چرخه buggy.—

The etymology and even the origin of the word seem to be unknown. Probably H. cf. Hobson-Jobson, s.v.

***bayna*** ( بغنه ) = P. برهٔ تودلی بوست skin of a dead-born lamb; morling.—

***ba-īntaraf*** ( با ینطرف ) = P. قبل before; ago: AA. از یک ماه باینطرف = P. یکماه قبل "a month ago".—

***ba-kār*** ( بکار ) = P. لازم necessary.—Also :

***ba-kār būdan*** ( بکار بودن ) = P. لازم بودن to be necessary;

***ba-kār dāštan*** ( بکار داشتن ) = P. لازم داشتن to need:

*marā ba-kār-as* }<br>*ma ba-kār dārum* } "I need it".

***baja*** ( بجه ) H. = P. ساعت hour:

*panj baja* ( پنج بجه ) = P. ساعت پنج "[at] five o'clock"; sometimes also:

*ba-sāt-i panj baja* ( بساعت پنج بجه ), or:

OL. بعمل دو بجه (*ba-amal-i du baja*) "at two o'clock".—

***baks*** ( بکس ) E. = P. کیف - همیان purse; wallet; bag. —From E. "box".—

***bamba*** ( بنبه ) Port. = P. ماشین - شیر a pump; a water-tap; an engine; a railway-engine.—From Port. "pompa" through the medium of H. cf. Platts بمبا.

***bandī*** ( بندی ) = P. زندانی - حبسی prisoner, convict.—'Abdul-Karīm, p 74 l. 17 has got بندیان را.—

***band kardan*** ( بند کردن ) = P. بستن to close, to shut: *darwāza band ku* = P. در [ را ] بنده "shut the door!" Probably under the influence of H. بندنا - بندهنا etc. cf. also *basta kardan*

***band šudan*** ( بند شدن ) = P گرفتن to take (speaking of fire) syn. *časpīdan*.

***bandubast*** ( بندوبست ) H. = P. قرار داد - قرار arrangement, agreement.—Not used in P. and probably never was.—

***bank*** ( بنک ) E. = P. بانک F. bank.—

***bar*** ( بر ) obs. = P. عرض width, breadth.—Is also used in P., but less often, and might be considered both obs. and vulg.

***baranda*** ( برنده ) H. = P. دالان veranda. (The P. equivalent was suggested to me by W. Ivanow.) For the origin of the word and the various hypotheses regarding the same v. Hobson-Jobson, 964b-966a.—

***barča*** ( برچه ) H. = P. نیزه spear.—

*barjasta* ( بر جسته ) H. =P. ممتاز - شاهان prominent; excellent, superior, distinguished: AA. خدمات برجسته "distinguished services". Platts gives, however, for that H. word entirely different meanings, v.s v.

*barqīwālā* ( برقیوالا ) H. =P. مندور F-R. electrician —For the suff *wālā* v. Introduction, p. 17.

*barsātī* ( برساتی ) H. =P. باراني بالتوى raincoat, mackintosh, waterproof. —From H. برسات *barsāt* "the rainy season".

*barzafšānī* ( برزافشانی ) = P کاشتن sowing.—

*ba-sar āmadan* ( بسر آمدن ) obs =P. منقضی شدن to come to end; to end.—

*basta āmadan* ( بسته آمدن ) =P منعقد شدن to be concluded: AA یک معاهدهٔ معاونت و تأمینات بسته آمده است "a treaty of mutual assistance and security was concluded".—

*basta kardan* ( بسته کردن ) =P. بستن to shut, to close. v. Introduction p 28. syn. *band kardan*.—

*ba-šumar raftan* ( بشمار رفتن ) =P. محسوب شدن to be counted as, considered as.—

*ba-xātir-i az* ( بخاطر از ) =P در خصوص regarding; concerning; with reference to.—

*baxš*, *baxša* ( بخش - بخشه ) =P برای - بواسطه for· *baxšitān* (the short -i- being probably an izāfa, cf. the chapter on Pronouns in the Introduction) = برایتان - بواسطهٔ شما (or واسطهٔ شما ) "for you".—

*baxšiš* (بخشش) H =P. انعام tip, gratuity.—In P. بخشش, though hardly ever used, means "a gift" (from a superior), تقدیم being the term for "a present, an offering" (from a subordinate). Both these P. words denote presents in kind, whereas in K *baxšiš* is used, as in H. and also in T, to denote a monetary retribution for slight services supposed to be rendered by subordinates —cf. for it the most lucid excursus in BrYear pp. 68–69, on the different expressions used in P. in the sense of "presents".—

*baxšūdan* ( بخشودن ) =P بخشیدن to give, to grant:

AA. برابما (*sic*) جز به ذلّت از چین خارج شدن دیگر نتیجه نخواهد بخشود "no other issue can present itself to us, but to leave China with shame".—

In P. بخشودن means "to forgive, to pardon".—

*bay* ( بی ) T. =P. بیگ bey : AA. جہال بی - مظمی بی etc.

*bayn* ( بین ) =P. درمیان - در - تو - اندر in, inside.—In P بین means "between". One might be inclined to think that, after all, the K expression is not at all the A. بین but might be one of those rare Huzvarishn words (like *gabra*— گبر ) which have somehow leaked through into Persian from Pahlavi: in fact the MP. ideogram *daycn* (trad.) or *bâên* also means "in, inside" not "between" and has for its Pāz. equivalent *andar*.—

*baytu-l-xalā* ( بیت الخلا ) T. =P. مستراح lavatory; syn. *āwrīz*, q.v.

*bābā* ( بابا ) =P. پدر father: *ī bābāś-as* "that is his father". In P. the word is used caressingly by children when addressing the father (or jocosely by parents when speaking to small children, or also as a term of contempt when talking to a subordinate) and corresponds rather to the E. "dad, daddy".—HoutSch p 51 gives also *bābā* "Vater", as "Dialect von Sô, einem Dorfe zwischen Ispahān and Kaschān."—The word *padar* is, however, also current in K.—

*bābā yarγarī,—yarγarū* ( بابا غرغری - غرغرو ) =P. رعد thunder. Prob. fr. the Psht verb عرېدل *yarīdal* "to thunder", although there also exists a P verb غرّیدن (*γurrīdan*) of the same meaning. All these words are anyhow onomatopoeic —

*bābā kalān* v. *padar kalān*

*bādamjān-i rūmī* ( بادنجان رومی ) =P. فرنگی گوجهٔ tomato.—The word بادنجان means both in K. and in P. "egg-plant" and is seemingly a corruption of the A. بیض الجان ) (sing. بیضة الجان ) "eggs of the genii", one would say in E. "devil's eggs".—

*bādār* (بادار) =P. صاحب - ارباب master, employer.—Probably = بار دار "one who provides for; a bread-giver" (lit. "supporter"). cf. IvBirJ. p. 301, No. 111; p. 304 No. 125 etc. and in his Vocabulary pp. 338, 343, given as *bodor*, *wodor*. The form with initial *w-* has not come to my notice in K. cf. also MorgFront. p. 389a (in Ormuri).—

*bādrang* ( بادرنگ ) H. =P. خیار cucumber.—In P. بادرنگ means only "grape-fruit"

*bālāpūś* ( بالا پوش ) =P. پالتو F. overcoat.—Probably a translation or imitation of the E. term. In H. بالا پوش means "coverlet, quilt" (Platts), but it might have been

borrowed (one way or the other) and misapplied or differently applied in the two languages. syn. *dabalkōt*, q.v

*bālišt* v *bilišt*

*bāmb* (ٔ .................) =P. بام roof LorPhon pp. 184a and 200b. respectively gives, however, *bång*, *bàng* and *båm* for Bdkhsh. and *bōm*, *båm* for Mdg

*bānī* ( بانی ) H. =P. آب پاش watering-can.—Borrowed obviously fr H *bālti* "a bucket, a pail". Seems to come from the Port "balde", v. Hobson-Jobson, s.v

*bāqa* ( باقه ) =P. قورباغه frog —cf IvTab p 11 note, where obviously the same word is recorded with another spelling بکک v also IvBirj. p. 338; MorgFront 240 b.

*bāšanda* ( باشنده ) =P متوقف established, living, staying: OL. *bāšanda-yi Hindūstān* "[so and so] who is living in India".—

*bāysikal* (بایسکل ) E. =P. دو چرخه bicycle.—

*bāzgašt* ( باز گشت ) =P. بر گشتن or مراجعت return · برای رفتن و باز گشت "for going and returning (Afghan visa on passports).—

*behbūd* (AA. بهبود) H =P. بهبودی well-being.—Both forms of the word are used in H in the same meaning, but the shorter form is not used in P.

*bēd* ( بید ) =P. بید (*bīd*) willow.—

*bēgāh* v. *bīgāh*

*bē'ī* ( بهی ) =P. به (*bih*) quince.—We find, however, that form in older literary Persian, e g., in the *Shāhnāma*: می آورد و نار و نرنج و بهی (Vullers-Landauer vol. III. p. 2) "she brought wine, pomegranates, oranges and quince".—

*bēl* ( بیل ) =P. بیل (*bīl*) shovel.—

*bētar* ( بهتر ) =P. بهتر ( *bihtar* ) better. Also:

*bētartar* ( بهتر تر) in the same meaning.—

*bidūn-i* [*az*] ( [بدون [ از ) =P. بغیر از or باستثنای besides; except: AA نهالهای بدون بید را (*nālhā-i bidūn-i bēd-rā*) "saplings except those of willow". cf. also 'Abdul-Karīm's text, p. 84 l 5: بدون بخارا دیگر مملکت نزدیک نیست "Bukhara is the nearest (foreign) country" (lit. "except Bukhara there is no country near").—

*biland* ( بلند ) =P. بلند (*buland*) high.—cf. MorgFront. (Par). 241a *be'land*; IvBirj. p. 301 No. 113 *belände*. But

LorPhon. p. 185a *buland* and 201a *büland* (the first probably a mistake altogether, and the second an inaccuracy). Steingass gives for it the incredible pronunciation *baland*.—

*bilist, bĭlišt* ( بلست - بالشت ) = P. وجب span.—Probably H., cf. my "Afghan Weights and Measures", JASB. vol. XXIV, 1928, No 4, p. 421.—

*bi-l-kull* ( بالكلّ ) = P. بكلى wholly, completely.—

*bill* ( بلّ ) E. = P. صورت حساب bill.—

*birtānıya* ( برطانيه ) H. = P. انگليس Britain, England.—

*bisyārtar* ( بسيار تر ) = P. بيشتر more.—cf. *bētartar*.

*bišqāb* ( بشقاب ) = P. بشقاب (*bušqāb*) plate.—

*bīda* ( بيده ) = P. يونجه hay.—Phillott gives: "Hay *bīda* (dried lucerne); *yunja* (sic) green lucerne; *'alafi khushk*". In Persia, however, "green lucerne" is called *'alaf* and "hay" *yūnjé* W Ivanow (in personal conversation) was so kind as to attract my attention to the word *vāš* and *xušk-vāš* used in the colloquial of Qazvīn for "hay"—The word was unknown to me, but Steingass gives, s.v. واش "Forage. food for cattle" (as usual, without any indications as to its origin).—

*bīgāh, bēgāh* ( بيگاه ) = P. شب - وقت شام in the evening at eventide.—The same in Psht., v. Raverty, s.v But, even in H. (cf. Platts, s v.), not to speak of P., بيگاه means "untimely; inopportunely".—

The word occurs in Muḥammad Amīn's text. T. 363 ll. 5, 18; 370 l. 14; 374 l. 14.—

*bīkār nabūdan* ( بيكار نبودن ) = P. كار داشتن to be busy: *ma bīkār nīstum* = P. من كار دارم "I am busy".—In P. بيكار means "out of job, unemployed; idle".—

*bīnī* ( بينى ) obs. = P. دماغ nose.—cf. LorPhon. p 200 b.; MorgFront. 241b. *bīni'xân* "nostril".—cf also MorgTexts 321 note.

*bīxī* ( بيخى ) = P. قطعاً fundamentally; wholly; totally; absolutely: *bīxī na-mānda* "nothing absolutely remains".—

*b'rāmadan* ( بر آمدن ) = P. بيرون رفتن - بيرون آمدن - اتفاق افتادن to go out; to come out; to happen: *b'rāmada* "he is gone out; he is not at home";

AA. نبرامده (*nabrāmada*) = P. اتّفاق نيافتاده "it did not happen";

*mībrāyad* "it happens"; "he will go out"; "he will go up". 'Abdul-Karīm has got several instances of بر آمدن used in that sense: p 16 l. 6 از ارگ بر آمد "he came out from the citadel", p. 37 l. 21 از بخارا بر آمد "he left Bukhara"; p 42 l 23 ارادهٔ بر آمدن داشتند "they wanted to leave"; p. 102 l. 2 یک ملیون پول نقدش بر آمد "it amounted to one million money in cash"; p. 102 l. 3 بقزلجر بر آمد "he went out to Qizıljar"; p. 109 l. 10 آهسته بر آمد "he went out quietly".—

Teufel has got: بر آمدیم p. 375 l. 10; p. 373 ll. 9, 10; بر آمده اند p. 300 l 1, and مبراید p. 339 l. 33; he has, however, also instances of the correct use of the verb (probably under the influence of literary Persian to which Muhammad Amīn seems to have been more open than 'Abdul-Karīm), for instance: p. 376, ll. 4–5 بالای از خاک ریز بدیوار قلعه بر آمده p 375 ll. 5-6 بنقارهٔ خانه بر آمده.—

*buhayra* (بحیره) = P. خلیج - دریا sea; gulf: AA بحیرهٔ بالتیک 'the Baltic Gulf" —In P. بحیره "a small sea; a lake".—

*bulukmišr* (بلوک مشر) = P. نائب Lieutenant: *bulūkmišr-i duyyum* (بلوک مشر دوئم) = P نائب دوئم Second Lieutenant. From T *buluk* "platoon" and Psht. مشر *mašar* "elder".

*burs* (برس) = P بورش (*buris*) brush.—Strangely enough the K. word seems to be borrowed from F. "brosse", whereas the P. term reminds us of the E. "brush". One would rather expect it to be the other way about.

*burut* (بروت) H. = P. سبیل whiskers, moustache. cf. Steingass. s.v.; Lor Phon. 185a; 201a; Morg Front. 242b; 389b; Morg Sh. 49. In Psht., however, بریت *bret* (Raverty).—

*butal* (بطل) E. = P. بطری (*butrī*) bottle.—

*buzurg* (بزرگ) = P. اولیا - ولی a saint.— cf. *kalān*. In P. بزرگ means only "great; big; large".—

*budana* (بودنه) = P بلدرچین T. a quail.—

*budā* (بودا) H. = P. پیر مرد old man.—Also Psht. بوډا *būḍḍa*. Obviously H. بڈھا *buddhā* "old, aged; old man".

*budubāš* (بود و باش) H. = P. اقامت - توقّف staying; stay.—cf also *bandubāst*: most of these compounds, of which H. is so fond, have entirely disappeared in P. (or, maybe, never existed at all).

*būra* ( بوره ) H. = P. شکر sugar.—Obviously the H. بورا *būrā* "powder; sawdust, filings; coarse sugar; white sugar" (Platts).—cf., however, Steingass, s.v., who gives, besides the ordinary meanings of the P. word بوره, also the meaning "lump (?) sugar".—

*būrī* ( بوری ) H. = P. گونی bag.—

*būt* (بوت) E. = P. (1) اروسی boots; (2) پتدن F. shoes, and (3) چاکمه knee-boots.—

## Č

*čaka* (چکه) = P. پنیر cheese.—cf. Psht. چکه "coagulated milk, curd" (Raverty). Probably connected with the verb چکیدن "to drop, distil; trickle, ooze".—

*čaland* ( چلند ) = P. (1) رواج currency; current; (2) پول خرد small change.—Probably a corruption of the H. چلان "challan".—

*čam* ( چم ) = P. چمن grass; turf, lawn.—

*čambēlī* ( چمبیلی ) H. = P. یا سمن jessamine.—

*čamča* ( چمچه ) H.-T. = P. قاشق T. spoon. LorPhon. 179b gives it as "*čimča*" and 194b. as "*čamča*". cf. also MorgFront 246a. The word is used in K. along with its P. equivalent, which even seems to be more widely current.—

*čangak* ( چنگک ) = P. قلّاب hook: *čangak-i māhī* (sic چنگک ماهی ) = P. قلّاب ماهیگیری "fishing-hook".—

*čapa* ( چپه ) = P. وارونه - سرنگون upside down:
*čapa kardan* = P. بر گرداندن to turn over; to turn upside down";
*čapa šudan* = P. سر نگون افتادن "to fall upside down; to get overturned".—Obviously from P. چپ "left", in the meaning of "the wrong, the reverse side".—

*čapan* ( چپن ) T. = P. no equivalent. A coarse mantle made of thick cloth (almost like felt) peculiar to Afghanistan. Bianchi gives چپان "vieux (sic) vêtement", which is obviously our word.—

*čaparkat* ( چپرکت ) H. = P. تخت خواب bedstead.—The word is obviously an adaptation of the H. چھپرکھٹ *čhapparkhaṭ* "tester-bedstead". The K. word is, however, applied to the roughest kind of trestle-bedsteads made of inter-

woven ropes on a coarse wooden frame (as also used in India) The second link of the compound is interesting in so far, as it seems to enter also in the composition of the current P. word سمکت "sofa" —

*čaplī* (چپلی) H. =P. چارق sandals, slippers.—From the H. *čampal*, *čappal*.—

*čaprās* (چپراس) H. =P. فرن معلی - بادۀ در hinges —It is certainly a somewhat corrupted Persian (though non-extant in P.) compound چپ [و] راست "left [and] right" (like the above-discussed *bandubast*, *būdubāš*, probably coined by the Indian Moghuls), and I think that Platts is wrong when trying to derive the A.-I. "chaprassi" from some Skrt. root.—

*čarpū* (چرپو) =P. چربی fat; fatness.—cf. MorgFront. p 246b.

*časpīdan* (چسپیدن) =P. گرفتن to take (speaking of fire). cf. supra *band šudan*.—

*čašim* (چشم) =P. چشم (*čašm*) eye.—Note the intercalation of an unnecessary vowel even in an Iranian word. in A. words ending in two consonants such an unwarranted intercalation of a vowel is almost as current in K as in India: *wáqit* (inst of وَقت); *šámā* (inst of شمع), *qátal* (inst. of قتل); *sábir* (inst of صبر), etc. Before an *izafa*, however, that superfluous vowel disappears, v. Introduction, chapter on Pronunciation, p 13-14.

*čatal* (چتل) H. =P. کثیف dirty.—Probably H. چتلا "spotted, speckled".—

*čatrī* (چتری) H =P چتر umbrella, sun-shade.—

*čawkāt* (چوکات) H =P. قاب frame. Obviously the H. چوکٹ "frame of a door", etc. (Platts).

*čawkī* (چوکی) H. =P صندلی chair. cf. MorgFront. 245b.—

*čaukīdan*, *jawkīdan* (چوکیدن - جوکیدن) =P. کوبیدن to pound.— is not found in dictionaries As a conjecture, one may take it to be a secondary formation from the جوکوب (lit "pounded to the size of barley-grains") given by Steingass, s.v as "bruised, coarsely ground", and by Raverty, s v, as "half-pounded, coarsely ground", i.e. جوکوبیدن (or جو کوبیدن) > جوکیدن > چوکیدن.—Lor Phon. gives it p. 179b as *čukīd-*, *čikīd-*: *čuk-*, *čik-* "to hammer, pound, hammer in". Whether in any way

connected with چکش "hammer": I find in Morg Front. 391b the latter word with the spelling *ču'kūš*?

*čawrī* ( چوری ) H. = P. مکس پران "a chowry", cf. Hobson-Jobson s.v.

*čārmayz* ( چار مغز ) = P. گردو walnut.—Nay, even: *čūb-i čārmayz* "walnut-tree". cf. also LorPhon 179a, 194b (given in the latter case as "*čärmās*"); Morg Front. 392a, given as "*čâr' mâys*"). The compound چهار مغز "the four marrows", is used in P. to indicate a trayful of four kinds of nuts, i.e., walnuts (گردو), hazel-nuts ( حوز ), pistachios ( پسته ), and almonds ( بادام ), which in Persia are often served at receptions on various occasions and eaten together with dry raisins —

*čār-rā'ī* ( چار راهی ) = P. چهار راه; a cross-road; a crossing.—With a *yā-yi nisbat* —

*čāwnī* ( چاونی ) H. = P. سربار خانه barracks, cantonment. Obviously the H. چهاونی.—

*čāwuk* ( چاوک ) obs. = P. زود, quick: *čāwuk biyā* "come quick!" Lor Phon 179a, 194b. In 'Abdul-Karīm's text the word occurs only once p. 104 l. 3: هرگاه کسی اندک چاوک راه رود "if anybody does not move quick enough.... ".

*čāyjūš* ( چای جوش ) = P. قوری - غوری teapot And also:

*čāynak* ( چاینک ) R. = P. ,, ,, ,,

*čaγil* ( چغل ) = P. غلبیل - غربیل a sieve.—cf. also MorgFront. 391b.

*čihāp* ( چهاپ ) H. = P. چاپ (*čāp*) printed; printing; print —

*čiklīt* ( چکلیت ) E. = P. شوکولاد (*šūkūlād*) F.-R. chocolate.—

*čilim* ( چلم ) H. = P. قلیان water-pipe, hookah.—

*činār* ( چنار ) = P. تبریزی poplar (Populus alba). In P. the word چنار is used for a "plane-tree" (Platanus orientalis).

*činčirdīn* ( چنچردین ؟ ) E. = P. تنتور دیود F. tincture of iodine.—

*či-wáqit* ( چه وقت ) = P. کی when.—The P. word is very seldom used in K and even not understood at all by the lower classes of the Afghan population, who invariably mistake it for که "who".—

*čīčak* ( چیچک ) T. = P. آبله small-pox: *čīčak zadan* ( چیچک زدن ) = P. آبله کوبیدن "to vaccinate".—

*čir kardan* (چر کردن) H. =P. پاره کردن to tear up.—Obviously fr. the H. چرنا "to rend, tear", etc.

*čuf* v. *čūp*.

*čukčuka* (چک چکه) =P...... .? rumours —Steingass has got چکاچک *chukāchuk* "anything whispered about" and چکچک *chukchuk* "news spreading on every side".—I have not met with the word in P

*čumluk* (چملک) T. ?=P. مچاله - مشرده - خورده چین crumpled, creased —

*čup* v *čūp*.

*čuqur* (چقر) =P. (1) عمق - گودی - بلندی depth; (2) بلند - گود - عمیق deep.—Bianchi gives in vol I, Appendices p. 777a: چغول *tchughoul*, s.p "Fosse, trou en terre", which seems to be the same word Morg Front 245b has, however, got. *čuku'ri* "a well". Turk. *čukur* "deep. a hole", etc. W. Ivanow was so kind as to inform me (by letter) that the word is used in the gipsy-jargon of Khorasan in the meaning of "a depression in the ground, a valley between hills", etc —

*čurut* (چرت) A -I =P. سیگار cigarette syn. *sigrit* q.v. From A -I "cheroot".—

*čux* (? چخ) =P زرنگ clever. Lor Phon 179b has got: *čuk* "straight, upright (?)" which seems to be the same word.

*čubwālā* (چوب والا) =P. هیزم فروش wood-seller.—For the suffix v. Introduction, p 17

*čuča* (چوچه) =P. جوجه (*juja*) chick, chicken; also "the little ones" of any animal *čūča-i pišak* (چوچهٔ پیشک) =P. بچهٔ گربه "kitten";

*čūča-i sag* (چوچهٔ سگ) =P. بچهٔ سگ - توله "whelp"; nay, even:

*čūča-i gāw* (چوچهٔ گاو) =P. گوساله "calf".—

Lor Phon. 148 gives *čūčik* "the young of animal, of bird". This seems to be an older form of the same word and probably ought to be read with the suff. *-ak*, not *-ik*, [cf however, the South-Russian (prob. T.) "*tsulsyq*" "a whelp; a small dog", where the vowel in the termination is *-y-* (*-i-*), not *-a-*].—

*čūna* (چونه) H. =P. آهک نبده - آهک زنده quick lime.—Obviously H. چونا "lime, slaked lime" (Platts).—

*čūnki* ( چونکه ) =P. چون - براى اينكه - براى اينكه - از براى as; because. Probably under T. influence.

*čūp, čup, čuf* ( چوپ - چپ - چف ) H =P. خاموش silence; silent.—From H. چپ *čup* "silence, quiet, stillness", etc.

*čūr kardan* ( چور كردن ) H. =P. چابو كردن T. to rob; to loot.—

*čūtī* ( چوتى ) H. =P. پتبن shoes —From H. جوتي

*čūtī* ( چوتي ) H. =P. تعطيل holiday; vacations From H. چهوٹ "severance, separation; l i b e r a t i o n , r e l e a s e" —

*čūxa* ( چوخه ) T. =P. n o e q u i v a l e n t. A coarse mantle (cf. *čapan*). From T چوخا - چوخه - چوفه "drap et étoffe en général, et particulièrement sorte de vêtement de moine" (B i a n c h i).—cf. I v R u s t. 256 "*chugha*, a warm cotton cloak, worn by men".—

D

*da* (—[ر]د ) =P. در (*dar*) in.—cf. also I v B ı r j. No. 12 l 4; No 13 ll 2, 6, 7; No. 15 ll. 3, 4, 5, etc.

*dabal* ( دبل ) E. =P. دولائي - دوبلا double: *nān-i dabal* "white bread (European)".—From the H.-E ڈبل *dabal* (used in India with reference to coins).—

*dabalkōt* ( دبل كوت ) E =P. بالتو F. overcoat.—Syn. *bālāpūš*, q.v.—

*dafādār* ( دفعه دار ) H. =P. وكيل - وكيل باشي sergeant; non-commissioned officer.—

*dalla* ( دلّه ) =P. دلّاله go-between; procuress —Abbrev of the P. word. Occurs also occasionally in popular literature, as a feminine name: دلّه و مختار (name of a book, v. H. E t h é Neupersische Litteratur (Grdr. d Iran Phil. II p. 323); also (دلّه محتاله), as name of a woman in different popular tales —The abbr. seems to be also current in A.: cf. for instance, **Burton**, Nights, II, 329, and elsewhere.

*dar bayn-i* ( دربين ) =P. توى - درميان - ميان in, inside: *dar bayn-i bāγ* "in the garden". In P. دربين is applied rather to t i m e than to place: دربين راه "during the journey", "when passing". v. supra *bayn*.

*dar dādan* ( در دادن ) =P. روشن كردن to light (the fire).—

*darwāza* ( دروازه ) =P. دريچه - در door (of a room, of a house); door (of a carriage, of a stove, of a cupboard, etc.) In P. دروازه means only "the gates (of a city)".—

*daryā* ( دریا ) = P. رود - رود خانه river :

*daryā-i Kābul* "the Kābul-river".—'Abdul-Karim has got: p 14 l. 16 دریای حیر مند—p. 46 l. 8 (sic) دریای عموید p. 65 l. 15 دریای آموید etc. Also T. 272 l 16 دریای کافر نهان etc. In P دریا means only "sea", and its diminutive دریاچه means "lake".—

*dastār* ( دستار ) = P سندیل turban —

*dasti* ( دستی ) = P الآن directly, immediately —

In P دستی is an adjective and means only "cash-money; advanced-money; hand-money".—

*dastūr* ( دستور ) = P. اماله enema, clyster, clyster-pipe.—

*dašnām* ( دشنام ) = P. فحش abuse, invective.—

The word is obs. in P. but anyhow spelt with a *zamm* in its initial syllable. *dušnām*

*daurāwar* (دوراور) = P دوروز all around —It is difficult to decide, whether we have here in the *-ā-* a part of a suffix *-āwar* (like, for instance, in *janāwar*, q.v.) or a connecting vowel merely, like in P. *barābar*

*dawūs* (? .. .) = P. دیوث a pimp, a voluntary cuckold (term of abuse).—

*dā* ( ده ) = P. ده (*dah*) ten.—

*dādagi* ( دادگی ) = P صادره - صادر despatched; outgoing: OL تلگراف دادگی وزارت تجارت "a telegram sent by the Ministry of Commerce". - cf. also *firistādagī*.

*dād u girift* ( داد و گرفت ) = P. داد و ستد commerce; commercial transaction.—The standard expression, however, is also used in K.

*dāyma* ( داعمه ) = P. داغ blemish; spot, stain (when speaking of carpets, clothes, etc.): *i qālīn dāyma dāra* "this carpet has got stains".—

*dāira* ( دائره ) = P اداره department; direction :

AA. دائرهٔ پسته و تلغراف = P. ادارهٔ پست و تلگراف "Post and Telegraph Department".—

*dāk* ( داک ) H. = P پُست mail, post: *dāk-xāna* = P. پستخانه "Post-Office". cf also Hobson-Jobson under "*dawk*".—

*dāl* ( دال ) H. = P. نخود peas.—

*dān* ( دهن ) = P. دهن (*dahan*)—دهان (*dahān*) mouth.—

*dānānīdan* ( دانانیدن ) =P. معلوم نمودن to make known :
AA. ...... باید بدکتر مذکور بدانانیم "we must make it known to the said doctor.. . " cf. also Introduction p. 31-32.

*dānistan* دانستن =P (1) دانستن to know ; (2) ملتفت شدن to understand : *dānistum sāb* "I understand, Sir". Syn. *fāmīdan* q.v. cf. also *dānista šudan*, Introduction, p. 28.

*dāra* ( داره ) =P. راهزنی robbery.—From Psht. دار *dāṟ* "a company, a band, a gang of thieves" (Raverty): NN. دزدی و داره و تاراج "theft, robbery and looting".—

*dāru-l-hukūma* (AA دار الحکومه) =P. پایتخت capital.—

*dāsūmī* ( ده صومی ) =P. ده منانی ten roubles (Russian gold coin). Probably for ده سومی "a tenner".—

*dāš* ( داش ) =P. تُر stove (for cooking).—The word, though less often, is also used in P.

*dāw* ( داو ) =P. فحش abuse, invective. Syn. *dašnām*.
*dāw zadan* =P. فحش دادن to abuse.—cf. also Steingass s.v.—

*dēg* ( دیگ ) =P. دیگ ( *dīg* ) pot, kettle.—

*dēwāt*, *dīwāt* ( دوات ) =P. دوات, (*davāt*) inkstand.—

*dilkušā* ( دلکشا ) =P دلگشا (*dilgušā*) "expander of hearts": *kot-ı dilkušā* pr. n. of a palace in Kabul.
In P. the verb گشودن is always pronounced with a voiced initial guttural.—

*dıqq*, *daqq* ( دقّ ) =P قهر vexation, anger : *ma az tu diqq šudum* =P. من از تو قهرم or من از تو قهر کردم "I am angry with you".
The word is extremely current in K. and, though certainly never used colloquially in P., can, however, be traced in literary Persian : In the Mathnavi (Bombay ed 1318) we have got p. 116 l. 27 :

جز مگر آن صوفئی کز نور حق
سیر خورد او فارغ است از ننگ و دق

And not only in older literature, nor confined to Eastern Persia, but also in such a comparatively modern poet of Shiraz, as Qa'ānī in his Parishān (Browne, Lit. Hst. IV, 327).

تا ز حسودان نرسد دق مرا
سخرهٔ باطل نشود حق مرا

Probably often also elsewhere.—In these two examples it rhymes with *haqq*, which means that it was pronounced in Persia with a *fath*. Yet, in K. the pronunciation *diqq* is by far more current than *daqq*, though, generally speaking, the vowel in it is somewhat veiled.—

*dırišī* ( دریشی ) = P رخت clothes.—Probably E. "dress", through H.-P s h t. cf M o r g F r o n t. 251a.—

*dısambar* ( دسمبر ) E. = P. دسامبر (*dısāmbar*) F December.

*dīgam* (popular) = P. دیگر other; again.—

*dīn[a]rūz* ( دینروز ) = P. دیروز yesterday cf. L o r P h o n. 182a, 197b (in the latter place merely *dīna*); also H o r n (Grdr. d. iran Phil. I), pp. 27, 164 (*dīna*) —

*dīrīn* ( دیرین ) = P. دیرینه ancient.

*dīwāl* ( دیوال - دیوار ) = P. دیوار (*dīvār*) wall.—In P. v u l g a r l y, however, also *dīfāl* —

*dōbī* ( دهوبی ) H. = P. رختشوی washerman.—

*dukšanrī* ( دکشنری ) E. = P. لغات or کتاب لغات dictionary.—

*dumal* ( دمل ) = P. دنبل (*dumbal*) imposthume, abscess.—S t e i n g a s s, s v. thinks it obviously to be an arabicized form of the P word.

*du-mīla* ( دو میله ) = P. دولوله two-barrelled: تفنگ دو میله "a two-barrelled gun".—

*dusad* ( دو صد ) = P. دویست two hundred.—Often in the S h ā h-n ā m a, also in the M a t h n a v i, for instance, p. 117 l. 13 (Bombay ed. 1318): که دو صد لعنت بر این تقلید باد v. Introduction, under Numerals —

*dūkān* (AA. دوکان ) = P. دکّان (*dukkān*) shop.—

*dūlča* ( دولچه ) = P. (1) سطل bucket.—A corruption, in diminutive form, of A *dalv* > *davl* > *dūl*. H o r n (Grdr. d. iran. Phil. I) p. 6, 56 seems to accept this form (*dōl* in his transcription) as normal and thinks it to be an Aramaic loan-word (on p 6) and a Syriac loan-word (on p. 56).— (2) شاشدان chamber-pot.—

## E

*ēn-a* (؟......), = P. whether این است or the old اینک ? "Here!"; "here you are!"

F

***falālīn*** ( فلالين ) =P. فنالين (*fanālin*) flannel.—

***falīta*** ( فليته ) =P. فيطان ribbon.—The word seems to be a transposition of the A. فتيلة (*fatīla*) "twisted (rope); a wick". Yet, cf. Horn, p. 6, who gives "*palīta* 'Docht'" as an Aramaic loan-word in Persian.—cf. also Lor Phon. 142 p. 20. Raverty s.v. gives only the meanings "a match, torch, wick, fusee", and for فليته دار "a matchlock, being fired with a match".—The H. فيته "ribbon; tape" seems not to be connected with our word, being, as correctly pointed out by Platts, s.v., a Portuguese loan-word. —cf. also Hout Sch., 56, who gives *pilī'teh* as Mukri and Khurasānī Kurdish, etc.

***farničar*** (OL. فرنچر ) E. =P. اثاث البيت - اسباب خانه furniture.—

***farvari*** ( فروری ) E. =P. فوريه F. (*favriya*) February.—

***fawqan*** ( فوقاً ) =P. درفوق above.—

***fayl*** ( فيل ) E.-H. =P. ناکام failing; failed (at examinations).

***fayr*** ( فير ) E.-H. =P. شليك fire-shot, round: AA. ١٥ گلوله فير "fifteen rounds".—

***faysala*** ( فيصله )=P. تسويه completion, settlement (of an affair).—

***fayšun*** ( فيشن ) E. =P. تزيينات decorating, adorning, garnishing.—From E. "fashion".—

***fābrīk*** ( فابريك ) =P. كارخانه works; mill. From German.

***fābrīkagarī***, ***fābrīqagarī*** (AA. فابريكه گرى — MA. فابريقه گرى) =P. صنعت fabrication, production, construction.—

***fāltū*** ( فالتو ) H. =P بدكي spare-parts.—

***fāmandan*** ( فهماندن ) =P. حالي كردن to explain; to make understood, to make understand: *fāmānda tuwānistum?* "do you understand?" (lit. "was I able to make [it] understood?").—

***fāmīdan*** ( فهميدن ) =P. ملتفت شدن to understand. cf. *dānistan*. In current speech *fāmīdan* is rather used in a question,— *dānistan* in the reply to the same:

Q. *fāmīdī?* "did you understand?"

R. *dānistum* "I understand".—

***fāsila*** ( فاصله ) =P. لوبيا phazel, bean.—

***firistādagī*** ( فرستادگى ) =P. فرستاده sent, dispatched: OL.

باد داشت فرستادگی خود "the note sent by yourselves". v. Introduction, p. 17 cf. *dādagī*.—

*firistāndan* ( فرستاندن ) = P. فرستادن to send, to dispatch, to forward.—v. Introduction, p 31.

*firistīdan* ( فرسیدن ) = P فرستادن to send. cf. *uftīdan*, *aftīdan*.—

*firqamišr* ( فرقه مشر ) = P. صدر بنج Lieut.-General.—For the second link of the compound v. supra *bulūkmišr* —

*filmurγ* ( فیل مرغ ) H. = P. بوقلمون a turkey.—

*fi-māh* ( في ماه or فماه ) = P. ماهی [ در ] per mensem.—For other such hybrid combinations cf. *fī-sad*, *lā-čār*, etc.

*fī-sad* (في صد) = P. در صد or صدی per cent: AA. في صد ( ۴ ) کمیشن "4 % commission".—

*fīz* ( فیز ) E. = P. شهریه fees (at a school).—

*fōlō* ( فوتو ) E. = P. عکس photograph —

*furūš* (AA. فروش pl. of فرش ) = P. فرشها carpets.—

G

*galūn* ( گلون ) = P. گلو throat v. Introduction p. 11 cf. Morg Front. 395a.

*galūš* ( گلوش ) E. = P. گالس goloshes.—

*gap* ( گپ ) = P. حرف word —

In P. گپ means "idle talk", 'gibble-gabble", etc., and is used in that sense in the Caspian Provinces of Persia (more especially in Mazandaran) *Gap zadan* ' to talk".— Yet, cf. Horn, p. 76 § 34, 3.—Lor Phon has not got the word recorded, but I find it in Morg Texts p. 311, also in LSI. 529. cf. Psht. *gapah*. The word must be very old and seems to be directly connected with the verb گفتن also Morg Front. 254a. cf. also E slang "gab". "guff" —

*garrāčī* ( گراچی ) = P............wheel-barrow. May be in some way connected with the Psht. گر *gar*, explained by Raverty as "the sound produced by the wheels of a cart or carriage, rattle or clatter of wheels". unless it be a corruption (by transposition) of *gār[r]īča* ( گاریچه ) "a small cart", which seems to be not quite devoid of probability.—

*garyāl* ( گریال ) H. = P .(1) ساعت clock; (2) زنگ bell, gong.—

*gatt* ( گتّ ) H.-Psht =P. مخلوط - فاطع mixed.—Obviously from H گتّهه "coupled; joined, united" (Fallon); "entered into agreement or compact" etc. (Platts) cf. also Psht. گډ *gaḍḍ* "mixed, mingled", etc (Raverty) cf. also Morg-Front. 254b.—

*gays* (MA. گیس ) E. =P. گاز F. gas, gases —

*gādī* ( گادی ) H. =P. درشکه - کالسکه R. carriage —From H. گاڑی In P. the word گاری or عاری means "a waggon, a cart, a chariot", never "a carriage" —

*gādīwān* ( گادیوان ) =P. درشکه‌چي - کالسکه‌چي - صورچي a coachman —

*gāgīr* ( گاگیر ) =P. چموش vicious, restive (of a horse).—Probably from گاه "time" and گرفتن (in the neuter sense) "to catch, to stick": گاه گیر "one who comes to a stop from time to time" —

*gāhī* ( گاهی ) =P هیچوقت - هرگز never: *ma ānjā gāhī naraftum* 'I have never been there".—
In P گاهی means "once": گاه گاهی "once and again"; گاهی وقتی "from time to time".—

*gālis* v. *gālīs*.

*gālīs*, *gālis* ( گالیس - گالس ) E. =P. تسمهٔ شالوار - بند شالوار braces. —From the obs. E. "gallowses", whether directly or through the medium of H. (I was unable to find such a word either in Platts or Fallon). cf. Iv Rust. 257 "*kāliski*, the band, by which the *chārqat* is fixed on the head".—

*gāmiskot* ( گامسکت ) ) } =P. ? . . . . cretonne.—
*gāmiskotī* ( گا مسکتی )

*gāvāra* ( گهواره ) =P. ناتو cradle.—

*gilkār* ( گلکار ) =P بنّا mason, builder.—

*girang* ( گرنگ ؟ ) =P. سنگین heavy.—Seems to be a parallel form to گران.—MorgFront. 254b. has got *gi'rāng* and *gi'rān'gī*.

*gišnīč* ( گشنیچ ) P.= شوید fennel: *gišnīč-ī rūmī* =P. جعفری "dill, parsley".—

*gul-i karam* ( گل کرم ) =P. کلم گل cauliflower.—The form کرم seems to be older than کلم the word being (according to Horn, p. 6) a Greek loan-word (κράμβη).—

***gul šudan*** ( گل شدن ) =P. خاموش شدن to go out (fire): *ātaš gul šuda* "the fire is gone out".—

***gul kardan*** (گل کردن ) =P. [ آتش را ] کشدن - خاموش کردن to blow out, to extinguish.—Steingass, s.v., gives the following secondary meanings for the P گل *gul*: "embers; a red colour; snuff of a lamp or a candle;.. . balls of charcoal used for burning the tobacco in a hookah; the caput mortuum of tobacco left on the tile of a hookah after smoking". For *gul šudan* he gives, however, the meaning "to become manifest, to arrive at the summit of greatness". The last two of the above enumerated secondary meanings for *gul* given by Steingass point to their H origin, as the water-pipe ( قلیان ) is never called "hookah" in P., nor are any "balls of charcoal" ever used in Persia for the water-pipe On the other hand, the above meanings for *gul* are also recorded by Platts, who gives besides: "*gul karnā* to extinguish (a candle or a lamp)"; and "*gul honā* to be extinguished; to go out (a lamp or a candle)".—That makes me think that there is a close connection between the H. and the K. expressions. Furthermore proof positive for the existence of the word *gul* in the meaning of "embers" (may be originally *gul-i ātaš* "the flowers of the fire", i.e., "the hot coals") would seem to be offered by the word گلخن *gulxan* "fire-place in a bath; oven; furnace", where the second link of the compound might be a lightened form of *xāna* "house" cf. also Morg Front. 253b, 394b.

***gurda*** ( گردہ ) H.=P کلوہ - کلیه kidney.

The word is of Persian origin but not used in Persia, where its A. equivalent slightly modified ( کُلْیَه < کُلْوَة < . کُلْیَة ) is current. I am not prepared to say, whether the A. word itself is not an early borrowing of Iranian origin.—

***gusil kardan*** ( گسل کردن ) =P. روانه کردن - فرستادن to send; to put on the way.—

The expression is obsolete, but occurs in literature, cf. for example, the Siyasat-Nāma (ed by Ch. Schefer, Paris, 1891) p 73.—Syn. *rāi kardan* q v.

***guzaštāndan*** ( MA. گذشتاندن ) =P. عبور دادن to make pass.—

***gūgird*** ( گوگرد ) =P. کبریت (vulg. *kirbīt* and even *čirbīt*) matches —Syn. *māčis* q.v.—In P. گوگرد means only "sulphur".—

***gūla*** ( گوله ) =P. گلوله bullet.—

***gūr kardan*** ( گور کردن ) =P. فرو کردن to let down; to let in, to drive in:

AA. ملخ دم خود را در ریگ گور کرده تخم می اندازد "the locust thrusts its tail into the sand and lays eggs".—

## Γ

***γarīb*** ( غریب ) H. =P. فقیر poor, indigent.—In P. غریب means only "stranger" and (sometimes also) "strange".—

***γaωr kardan*** ( غور کردن ) =P. دقّت کردن - ملاحظه کردن to consider; to discuss; to think over.—The A. word غور means originally "to descend; to enter deep", and, though very current in H., is not used in P.—

***γayr-i hāzır*** ( غیر حاضر ) =P. غائب absent (from school, etc.)

***γazata*** ( MA. غزته ) R. =P. روز نامه newspaper.—

***γāz*** ( غاز ) R. =P. گاز gas: MA. غاز رهردار "poisonous gases". cf. *gays.*

***γundimišr*** ( غند مشر ) Psht. =P. سرتیپ دویم Brigade-General.—The first link of the compound is probably Psht. *γundi* "alike, similar, resembling" (Raverty, Morg Voc. s.v.). For the second link v. under *bulūkmišr* The whole would consequently mean literally something like "vice-chief".—

***γúsil-xāna*** ( غسلخانه ) H.=P. اطاق حمّام bathroom.—

***γūčī*** ( غوچی ) =P. پرستوک a swallow. MorgFront. 395 b. gives '*γuči* (with both short vowels) "a kind of bird".

***γūrī*** ( غوری ) H. =P. دوری - قاب a dish.—In P. غوری means "a teapot". H. dictionaries (Fallon, Platts) give the word as P. with the meanings of "dish", "plate".—Syn. *kišti*, q.v.

## H

***harb-i umūmī*** ( حرب عمومی ) T. ? =P. جنگ بین المللی The Great War.

***hāli*** ( حالی ) (vulg. *ālē*)— } =P. الآن - فوراً - حالا now; directly.—

I find the word in that meaning in the Siyasat-Nāma (Schefer, text) p. 72.—

## I

*idxāl* ( ادحال ) = P. دخول - داخل شدن entering; entrance: OL. تکت احازۀ ادحال "entrance-ticket".—

The A. word (IV form) implies the idea of an active meaning "to m a k e e n t e r" and could not be used in P. in the neuter sense —

*ihtifāl* (احتفال) = P. [ obs محفل] - مجلس - جماعت gathering: AA. احتفالی میکنند "they make a gathering", "they assemble in a gathering".—

*ijāzat* ( اجازت ) = P. اجازه (*ijāza*) permission: *ijāzat as* ? or simply *ijāzat* ? "[ you ] allow [ me ] ?"—

It occurs in 'A b d u l - K a r ī m's text p. 37 l. 23 and p 38 l. 5.—

*imkānbaxš* (MA. امکان بخش) = P. ممکن possible.—

*imšāllā* ( sic ان شاء الله ) = P انشاء الله (*inšā'allāh*) "if God [ so ] willeth".—

Probably on analogy with امشب - امسال - امروز.—Seems also sometimes to be a confusion with ماشاء الله, as there are cases when it is used with the p a s t tense: *imšāllā du sāl-as rafta būdum*

*ingliz, ingrīz* ( انگریز - انگلیز ) H. = P. انگلیسی English; Englishman.—Occurs already in 'A b d u l - K a r ī m's text as انگلیز p. 18 l 3; p. 34 l 18; p 36. l 7 (bis) —

*ingrīz* v *ingliz.*

*isbāl* ( اسبال ) = P. ارسال sending.—

*islayt* ( اسلیت ) E = P. سنگ لوح slate.—

*istašan-i rādiyō* (OL. اسٹشن رادیو ) = P. ستاسیون تلگراف بیسیم wireless station —

*išpilāq* ( اشپلاق ) = P. سوت whistle; whistling.—From P s h t. شپیلی *shpelæy*, dim. شپیلکی *shpelkæy* "a whistle, a hiss; whistling, hissing" (R a v e r t y) cf also l v B i r j. 340 "*isfiling, isfilink*" and "*i s t i f i l i n k*". Syn. *tūla*, q.v.

*ištabri* v *štabrī*

*ištarlang* (AA. اشترلنگ ) = P. لیرۀ انگلیس - پاوند انگلیس pound sterling.—

*ištihār* ( اشتهار ) = P. اعلان - اعلام advertisement.—

*itlā* (sic اطلاع ) = P. اطلاع (*ittilā'*) information.

*itlādā'i* ( اطلاعدهی ) = P. استحضار information, informing (lit. "the giving of information"): OL. شرف اطلاعدهي دارد "has

the honour to inform".—This abstract noun, which regularly occurs at the beginning of official letters, would seem to presuppose the existence of a compound adjective اطلاعده "one who gives information", from which such an abstract noun could only be derived. Yet, there is no such compound adjective even in K., not to speak of P., and the word seems to have been specially (and clumsily) coined in quite recent years —

*izār* ( ازار ) = P. شلوار - شالوار trousers.—

*izārband* ( ازاربند ) = P. بند شالوار trouser-string.—

*īsawī* ( عسوی ) = P. مسیحی Christian : سنهٔ عیسوی ۱۹۲۳ "year 1923 [ of the ] Christian [ era ] ".—

*īsāyī* (AA. عیسائی ) = P. عیسوی a Christian.—

*itālāwī* ( اطالاوی ) = P. ایطالیائی Italian.—

J

*jag* ( جگ ) E = P. تنگ jug.—

*jámā* ( جمع ) = P. جمع (*jam'* ) together ; joined ; total, etc.

*jantarī* ( جنتری ) H. = P. تقویم calendar.—Obviously derived from H. جنتر *jantra, jantr* "an observatory ; an astrological or magic diagram, a magic square", etc. ( Platts ).—

*janāwar* ( جناور ) = P. جانور *jānvar* animal ; insect.—

Whether a mere metathesis quantitatis or an amplification of the suffix with a subsequent shortening of the vowel in the initial syllable,—I cannot decide.—

*janwarī* ( جنوری ) E. = P. ژانویه (*žānviya*) F. January.—

*jarman* ( جرمن ) E. = P. (1) المانی F. German ; (2) المان F. Germany.—

*jarmanī* ( جرمنی ) E. = P. (1) المان F. Germany ; (2) المانی F German.—

It seems with regard to these two words that they were originally integrally borrowed from E. That is to say *jarman* (German) and *jarmanī* (Germany) were at the outset mere transliterations of the respective E. adjective and noun. Very soon, however, the misleading termination-ī must have been confused with a Persian adjectival suffix (*yā-yi nisbat*) and the meanings of the two words began to alternate, so that at the present time both of these words are used in both senses.—

*jarnayl* ( جرنیل ) E. = P. جنرال ( *janrāl*) F. General.—

*jarra* ( جرّه ) = P. پیاده on foot; walking: *ma jarra āmadum* "I came on foot" —Seems to be connected with the A. جرّ "to drag, to draw, to pull".

*jasti* ( حستی ) R = P. برنج latten brass.—Seemingly from the R. *žest'* "tin".—

*jālī* ( حالی ) = P. شلتوک rice in husk.—Probably Indian —

*jāli* ( جعلی ) = P. قلب false; bad (coin).—

*jānišīn* ( جانشین ) = P. مستأجر tenant —In P. جانشین means a "locum tenens", "a successor".—

*jāydād* ( جایداد ) H = P. تیول assignment of land; landed property —Also used in Psht., v. Raverty, s.v.

*jēl* v. *jihil.*

*jihil, jēl* ( جهل ) = P. جهل (*jahl*) stupidity, ignorance: *ilm-u-jihil* "learning and ignorance" (the Amīr in his speech at the inauguration of the memorial of the victory over the Mangals). More commonly *jēl*, cf. MorgTexts p. 324 and note 2 on the same page: also MorgVoc. s.v. *jēl* "ignorant".

*jīm* ( حیم ) H. = P. جین (*jīn*) E. twill; twilled cotton; drill (white or drab-coloured)—From the E. "jean" (i.e., "Genoese cloth").—

*jūdāgāna* ( جداگانه ) obs. = P علیحده separate; separately.—

*juyāla* ( حغاله ) T = P. شن gravel.—I find in Bianchi the T. چاقل - چاقیل "petit caillou", which seems to be another form of the same word

*juwārī* ( حواری ) H = P. ذرّت Indian corn, maize.—cf. Morg Front. 263a.—

*jūar* ( حوهر ) = P. جوهر (*jawhar*) essence.—

*jūlā[y]* ( [ی] حولا ) = P. عنکبوت a spider.—From P. جولاه "a weaver". Also Psht. cf. also MorgFront. 397b

*jūlāy* ( حولای ) E. = P. ژوئیه (*žūliya*) F. July.—

*jūn* ( حون ) E. = P ژوین (*žūan*) F. June.—

*jūr* ( حور ) H. = P. چاق well (of health). v. Introduction, Polite Phrases, p 44. In P. جور means only "equal, alike; assorted", also (as noun) "kind, sort".—From H جوڑ *jōr*.—

*jūra* ( حوره ) = P. جفت pair; replica.—

*jūrpursānī* ( حور پرسانی ) = P. احوال پرسی asking about health; greeting.—

*jūta* ( جوته ) H.-Peht=P. بدل imitation, substitute.—From H. either directly or through Peht. جوتة *jutta'h* (1) "refuse, leavings", etc (2) "base, false, as coin or gems" etc. (Raverty). In K., however, it is only an antonym of *sučča*, q v.

*jūtī* ( جوتي ) H. =P. کفش slippers (of Indian make).—

## K

*kačālū* ( کچالو ) H. =P. سیب زمینی potato.—In H. the word seems to have meant originally the esculent root of the plant Arum colocasia ("sweet potato", F. "la batate" or "la patate") and been only later transferred on the ordinary potato.

*kaf* ( کف ) E. =P. سر دست cuffs (of a shirt).—

*kalān* ( کلان ) obs. =P. بزرگ big. large; great. cf. MorgRep. p. 8 note. cf. T. 376 l. 11; 313 l. 26 For 'Abdul-Karīm v. under *xurd*.

*kalān-sāl* ( کلان سال ) =P. مسن aged, old: AA. کلان سال نوبن مردم "the oldest man".

*kal kardan* ( کل کردن ) =P. تراشیدن - اصلاح کردن to shave, lit. "to make bald".—

*kalt* ( کلت ) H. =P. نشان badge, order; decoration: کلت ساز. "maker of decorations" (on a sign-board in Kabul). From H. کلت *kalit* "machine-made; fabricated; contrived; beautiful".—

*kamānak* ( کمانک ) P.............plinth.

*kambūt* ( کمبود ) =P. کم - کسر coming short, wanting: AA. اضافه و کمبود =P. کم و زیاد "excess and deficiency".

*kamīsār* (AA. کمیسار ) R. =P. کمیسر F. commissioner.

*kamīsyūn, kamīsūn* (AA. کمیسون - کمیسیون ) =P. حق الزحمت- حق العمل commission; per cent. From German.—

*kamīšun* (AA. کمشن ) E. =P. حق العمل commission (as above)

*kančīnī* ( کنچنی ) H. =P. رقاص dancer: musician.—I find in 'Abdul-Karīm p. 106 l. 7 کنچینیها یعني رقّاصان, from which one can conclude that the word was known, but not currently used, since it needed an explanation.—

*karam* ( کرم ) =P. کلم cabbage, cf. supra *gul-i karam*.

*karā, karāh* ( کراه ) =P. کرایه hire.—

***karāhī*** ( کراهی ) =P. کرایه نی for hire.—

***karākaš*** ( کراکش ) =P. چاروادار muleteer. cf. Morg Texts, 326. The word occurs with the same spelling ( کراکش ) in 'Abdul-Karīm's text p 88 l. 23; p. 103 ll. 12, 14, 15.—

***karāyī*** ( کرائی ؟ ) =P. تابه - تاوه frying-pan.—Probably from Psht. کړدل *karrədal* "to be parched, grilled, scorched, baked", etc. (Raverty). Unless fr. the P. کره "butter"?

***karrat*** ( کرّت ) =P. دفعه - مرتبه time: *yak karrat* "once", "some time".

***kaš kardan*** ( کش کردن ) =P. کشیدن to pull, to drag.—

***kašīdan*** ( کشیدن ) =P. بیرون کردن - معزول کردن (1) to discharge (from office); to dismiss: *ūrū az xidmat mīkašum* "I shall discharge him from office";

(2) to drive away: AA. .. دشمن را . . از خاک مقدّس خود کشیده اید "you have driven away the enemy from your sacred [mother-] country".—

***kat-i*** ( کت ) =P. با with Syn. *hamrā[h]*. LorPhon. 169 gives and translates this word as "along with", but with a certain hesitation. MorgTexts has it pp 312, 313 and elsewhere, and translates it accordingly. LSI. X, 529 has got the word in the form *qat-e* There is no doubt as regards its meaning (the word is extremely current), but its origin is as dark to me, as it seemed to be to Lorimer, l.c. Could there be any connection with the Psht. *kat* "heap, pile" (Raverty, s.v.), also given Morg-Voc. 35 as "of unknown etymology"?—

***katlāk*** (AA. کتلاک ) E. =P. کتالوگ (*katālūg*) F. price-list catalogue —

***katta*** ( کتّه ) H. =P. کلفت thick, coarse.—Psht. غټه - غټ (*ɣat—ɣatta*) and کټّه (*katta*) Raverty, from H کٹا *kaṭṭā* "well-knit, able-bodied, stout, strong, sturdy", etc. (Platts).—cf IvBirj. 340 "*kat, katta* large, big"; also Morg Shugh 58 and MorgFront, 268 b. *katta-'bāw* "grandfather".—

***kawk*** ( ککک ) =P. کبک (*kabk*) partridge. cf. LorPhon. *kauk*, '*chikor*', "red-legged hill-partridge".—

***kawškān*** ( کفش کن ) =P دالان anteroom.—

***kāk*** (?......) E. =P. چوب پنبه cork.—

*kākā* ( کاکا ) H. = P. ( عمو ) paternal uncle.—In P. کاکا means "brother" and is used in application to slaves or servants born in the house ( خانه زاد ) : کاکائی سیاه or (more currently, dropping the *iẓāfa*) کاکا سیاه "a black brother (i.e. slave)". For the terminology of other degrees of relationship in K.v. MorgTexts 309 note 2.—

*kālā* ( کالا ) H. = P. رخت clothes.—Platts gives کالا - کاله *kāla* "silk-cloth; cloth" etc. as Persian; cf. also IvTab. 372.—also MorgFront. 265 b., 398 b (in the latter case recorded as *'kālī*).

*kāpī* ( کاپی ) E. = P. کپیه (*kupiya*) F. copying-pencil.—

*kārāt* ( کارات ) = P. کارها affairs, works: AA. ملخ بکارات زراعت انواع خسارات میرساند "the locusts cause [many] kinds of damage to agricultural works".—For the A plural-termination with a Persian word v. Introduction, p. 15–16.

*kārd* ( کارد ) E. = P کارت (*kārt*) F. card.—

*kārīz* ( کاریز ) = P قنات aqueduct.—A most concise description of a *kārīz* can be found in IvBirj. 240 note 1; also BrYear, p. 116, note —

*kārtūs* ( کارتوس - کارطوس ) F. = P فشنگ cartridge.—Obviously the F. "cartouche", also in Psht. and H, but through what channel?

*kārxāna* ( کارخانه ) = P. مطبخ - آشپز خانه kitchen.—In P. کارخانه means only "mill, factory, workshop" —

*kāški* (AA. کاشکه) = P. کاشکی (*kāškī*) Oh if! Oh would that happen!—The word کاش in the same meaning is also used in P., but as an exclamation or interjection, that is without the relative particle که —

*kāwal, kābal* ( کاول - کابل ) = P...... feather-grass (Agrostis linearis). Probably fr. Psht. کبل *kabl*. cf. also R. *kowyl'* (probably imported by the Tartars).—

*kāz* ( کاغذ ) = P. کاغذ (*kāyaz*) paper:

*kāz-i xuškī* ( کاغذ خشکی ) = P. کاغذ خشك کن "blotting paper";

*kāz-i rādār* (( کاغذ راهدار ) = P. کاغذ خط دار "lined paper";

*kāz-i dākī* ( کاغذ داکی ) = P. کاغذ نست "letter-paper" —

*kēlā* ( کیلا ) H. = P. موز plantain, banana; fruit of the Plantago sativa.—

*kēš* ( کیش ) = P. پتو a rug, a blanket.—The origin of the word is doubtful. MorgFront. 399 b. gives the meaning

"shirt" and marks it down as Persian. Steingass gives inter alia "muslin, fine cotton cloth";.... "a fur coat"; a kind of linen garment", and spells the word *katsh*

I am inclined to think with Raverty (s.v.) the word to be a Psht corruption of the H. کهیس *khes* (or *khīs*) "a kind of figured cloth; diaper, damask;— a sheet or wrapper of such cloth" (Platts), which probably was the result of a confusion with the Persian کشیدن or Psht. کښل *k'shal* "to pull, to draw".—

***kilk*** ( کلک ) =P انگشت finger.—In Persian کلک (obs) means "a reed, a reed-pen". Steingass, s.v. gives, however, as Persian, *kilk* "squint-eyed. the little finger". cf. MorgFront. 265 b. "'*kilk yušt* little finger Afgh. Prs. *kilk* (little) finger".—

***kilkīn*** ( کلکین ) H ? =P. دریچه - پنجره window. Syn. *urūsi* q.v. I do not find the word (which is, however, very current. being the only current word for "window" in K.) anywhere and can only think of it as a possible corruption of the Psht. کړکۍ *karr-ka'ī* .. "a window, a sally-port, a casement, a wicket, a loop-hole" (Raverty), which is, in its turn a loan-word from H. کهڑکی *khiṛki* "a private or back-door; poster-gate; wicket, sally-port; a window, casement; a shutter", etc. (Platts).—

***kišti*** ( کشتی ) H =P. دوری - قاب dish.—In P. کشتي means only "a boat", whereas in K. an "oval dish" bears that name probably owing to its shape. cf. the E. "vessel".—

***kitlī*** ( کتلی ) E. =P. دیگ kettle.—

***kīkā*** v. *ṭīkā*

***kīmiyāwī*** ( کیمیاوی ) =P. کیمیائی (*kīmīyāyi*) chemical. cf. *ītālāwī*, *tāīfawī*, etc.

***kōlar*** ( کولر ) E. =P یخه - یقل collar.—

***kōt*** ( کوت ) E. =P. سرداری coat.—

***kōtbana*** ( کوت بند ) E-P. =P لباس جای coat-hanger.—

***kōṭī*** ( کوتی ) H. =P خانه house —Fr. H. کوٹهی *koṭhī* "a masonry house", etc.

***kudām*** ( کدام ) =P. یک (or *yā-yi vahdat*) some. v. Introduction, p. 24. In P. کدام is always interrogative and means "which?".—

***kuland*** ( کلند ) = P. کلنگ (*kulang*) mattock, pick-axe —cf. Morg Front. 266a who gives it as *ka'land.*

***kulča, kulīča*** ( کلچه - کلیچه ) H. = P. . . . . . a cake, a biscuit. From H. کلیچه *kulīča*, which seems to have originally had the meaning of "an orb, a disc", and to have received only later that of a "round cake". cf. BrDial. 822 "کلیچه "bread mixed with oil and sugar, and made into the form of discs"; cf. R. *kulič* (prob. through the Tartars).

***kulfī*** ( کلفی ) H. ? = P. . . . . . sauce-boat, sauce-bowl.

***kunayn*** ( کنین ) E. = P. گنگنه (*gingina*) F. quinine.—

***kundukmišr*** ( کندک مشر ) = P. سرهنگ colonel.—I am at a loss with regard to the meaning of the first link of the compound, unless it is a synonym of غند (v. *γundimišr*) and is merely a diminutive of the Psht. گند *gund* "equal, even, level, on a par with, on a level with, co-equal" (Raverty) For the second link of the compound v. *bulūkmišr*.—

***kunjāra, kunjāla*** ( کنجاره - کنجاله ) ? = P. قُطاره - ثُماله dregs; remains of anything squeezed; oil-cake.—Whether from H. کنجال *kunjāl* "green scum formed on stagnant water" (Platts)?

***kurtī*** ( کرتی ) = P. . . . . . a tunic; a short coat; a jacket.— W. Ivanow was so kind as to inform me (by letter) that the word is quite current in Khorasan and seems to be a corruption of کردی "Kurdish".—

***kušūdan*** ( کشودن ) = P. بازکردن to open: AA یک مکتب حقوق سیاسی . . . . در خود وزارت جلیله کشوده است "a school of diplomatic (i.e. international) law has [been] opened at the high (i.e., honoured) Ministry" (i.e. the Afghan Foreign Office).—In P. the obs. verb گشودن is always pronounced with a voiced initial consonant. Its P. equivalent in the above quoted phrase would probably have been تأسیس شدن "to be founded".—

***kūčī*** ( کوچی ) = P. کوچری T. nomad.—

***kūka*** ( کوکه ) H. = P. میخ کوچک tin-tack: *kūka-i simī* = P. میخ کوچک مفتولی "wire-tack". cf. H. کوکا *kokā* "a small thorn, a prickle; a small nail, a tack" (Platts); cf. also MorgFront. 265a *kūk* "nail", etc. There seems to

be some connection between this word and the P. کوک "winding up; stitching, basting", etc.—

**kūta** (کوته) H =P (1) خانه house; (2) اطاق room: OL عمارت فوقاني وزارت داخله كه داراى كوته هاى متعددى است "the upper storey of the Ministry of Interior, which contains numerous rooms" H. کوتھی - کوٹھا etc.

**kūta'ī kardan** (کوتاهی کردن) =P. کوتاه کردن to bargain; to agree about the price of something.—The expression seems to be merely a corruption of its P. equivalent: in P. کوتاهی کردن means "to fail, to omit doing something; to withhold something".—

**kūya** (کویه) H. =P. بید moth, moth-worm.—Prob. from H. کویا *koyā* "cocoon (of the silkworm)".—

L

**lambar** v *nambar*.

**lambīdan** (لمبیدن) =P. افتادن to fall.—Probably connected with (if not directly derived from) Psht. لمبدل - لمبدل *lambedal* "to wash, to bathe, to dip, to soak" (Raverty). cf. however H. *lamb ḍālnā* "to drop (or let fall) a perpendicular (on)" (Platts).—

**langūta** (لنگوته) H. =P. مندیل - عمامه turban.—Fr. H. لنگوٹ *langoṭ* "waist cloth; loin-cloth".—

**lapp** (لپ) Psht.-H. =P. no equivalent A double handful.—The word seems to be Indian and to have crept into K. through the channel of Psht.—Steingass s.v. gives it as Persian (at least he does not mark it otherwise) and explains it as "a large mouthful".—cf also my "Afghan Weights and Measures" JASB, vol. XXIV, 1928, No. 4, p. 422.—

**laškar** (لشکر) obs. =P. قشون army.—Occurs, of course, in classical literature, colloquially, in P. however, only in titles (*laqab*) of [military] officers, like امیرلشکر or names of function like لشکر نویس "army comptroller", and such-like formations.—Occurs severally in Muhammad Amin's text: T. 294 ll. 3, 22; 306 l. 36; 362 ll. 2, 4, 16; 363 l. 18; 365 ll. 12, 16.

**lat kardan** (لت کردن) H. =P. کتک زدن to beat, to thrash (somebody).—Fr. H. لت or لات "a kick" (Platts).

**layk, līk** (لیک) obs. =P. لاکن - لیکن but.—

***laymbū*** ( ليمبو ) =P. ليمو (*līmū*) lemon,—seems to be merely a corruption of its P. equivalent.

***laymp*** ( لمپ ) E =P لامپا *lāmpā* R. lamp.

***layr*** ( لير ) E. =P. ترن train.—A corruption of the E. "rail" with the usual transposition of the two liquidae; also *rayl*, q.v.; also *qatār-i āhin* q v.

***lāčār*** (AA. لاچار ) =P. ناچار forcibly.—Such hybrid compounds with an A. particle, as the first, and P noun, as the second link of the combination, are utterly inadmissible in P.—

***lēāz*** v. *lihāz*

***lihāz, lēāz*** ( لحاظ ) H. =P حجت - واسطه cause, reason: AA. به لحاظ انکه - از این لحاظ "because of that; for that reason" A quite current word in K. speech, which. however, (although a not uncommon A. word in the meaning of "close observation") is never used in P., at least in the meaning attributed to it in K and H.

***liwāmišr*** ( لوامشر ) =P. سرتیپ اول Major-General.—The first link of the compound seems to be the A لواء "banner" For the second link v supra *bulūkmišr*.

***libarāl*** ( لبرال ) E. =P. آزادی خواه liberal: AA. حزب لبرال "the Liberals", "the liberal party"—

***lilām***, لیلام<br>***yilām*** یلام } H. =P. حراج auction-sale.—Seems to have been borrowed directly from Port leilão into K. where the corruption has not touched the initial consonant, as against H. نلام *nīlām*.

***lišak*** ( لشک ) =P. پوست برّهٔ تو دلی صاف skin of an unborn lamb without curls of *tiqir*. Whether in any way connected with لیسیدن "to lick", or contamination of لیز "sleek, smooth" with that verb?

***luč, lūč*** ( لچ - لوچ ) H. =P. لخت - برهنه naked, bare· *pā-i luč* =P. پا برهنه "barefooted".—The word seems to be borrowed fr. H. (maybe through Psht. where it takes, however, the form لڅ *lutṡ*), but it certainly is not P., and could hardly also occur in literary Persian. Morg Front gives it, however, p. 269a and 399b as Prs. (in the latter case in the form *lūč*).—

***luγat*** ( لغت ) obs. =P. زبان language: also in plur. *luγāt* ( لغات )

"languages". In P. the A. لغت means "a word", and its plur. لغات means "a dictionary".—

***luk*** ( لک ) = P. کلفت thick.—

***lukī*** ( لکی ) = P. کلفتی thickness.—

***lund*** ( لند ) H. = P. حاکش a sodomite-pander.—Probably from H. لونڈا.—

***lurrī*** ( لری ) E = P. کامیون F motor-lorry.

***lūč*** v. ***luč***.

***lūčak*** ( لوچک ) = P. لوطی vagabond, hooligan.—Probably a diminutive of the preceding.—

M

***ma, man*** ( مں ) = P. من (*man*) I —

Both forms of the personal pronoun of the 1st person (v. Introduction, p 21) are currently heard, with that distinction that the illiterate part of the population always drops the final *-n*, whereas the educated classes, although trying to use the "literary" form, drop the *-n* occasionally.

***madad*** ( مدد ) obs. = P کمک help —

***makāra*** ( مکارہ ) R. = P. بازار عام a yearly fair: AA. مکارۂ بین المللی در تاشکند "the international yearly fair at Tashkent".—

***makfī*** ( مکفی ) = P. کفایت sufficiency: adequate supply: NN. بقدر مکفی = P. بقدر کفایت "in sufficient quantities".— In the K. expression مکفی is an adjective determining the word قدر, which is taken here in its original value of an ordinary noun, whereas in P. the expression بقدر plays the rôle of a preposition and governs the genit. case.—

***maktab*** ( مکتب ) = P. مدرسہ school.—In K. the word مدرسہ is only applied to Muhammadan theological schools, which results in such misnomers as مکتب زراعت "the [writing-] school of agriculture"; مکتب حقوق "the [writing-]school of law", etc

***malāmat*** ( ملامت ) = P. مسئول responsible; open to blame: *agar na....ma malamat* "if not ...I shall take the consequences" (a very current expression, never heard in Persia). But cf Schefer, Siasset-Namèh, text, p. 48 l 9: اگر بدید نیاید مرا ملامت کن "if it does not show itself,—[then you will have the right to] blame me".—

*mánā* ( منع ) =P. منع (*man'*) prohibition, restriction.—

*mangas* (?......) =P. مگس fly —

*mansabdār* ( منصبدار ) H. =P. صاحب منصب military officer. Probably under the influence of H. (or vice-versâ). cf. also *afsar*.—

*manzūr kardan* ( منظور کردن ) =P. قبول کردن or قبول داشتن to accept. Lit. "to take into consideration".—I find one instance of this expression in 'Abdul-Karīm's text p. 71 l. 22: و منظور نکرد "and he did not accept".— In the case, however, where Md. Amīn uses the word (T 325 l. 37): منظور نظر خاقان کردانید it is used in the original meaning of the A. passive participle "seen": "he caused it to be seen by the eye of the Khāqān", i.e. "he showed it to the Kh.".—

*marātaba, marātiba* [?] ( مراتبه ) =P مرتبه (*martaba*) obs. or دفعه time: OL یک مراتبه باین اداره بیائید "will you come, when convenient, to this Office"—The form does not seem to exist at all in A., even were it to be read *murātaba* (masdar of the III form). It may be added here in parenthesis that in P. the expression یکمرتبه does not mean, as in K., "once", but means "all at once; suddenly". In all probability, the word ought to be read *marātiba* (although it is pronounced in current speech" *marātaba* and would be then the broken A. plural from مرتبه used in the meaning of a singular (v. Introduction, p. 16) with an A. indefinite article ( ةً — ) tacked on to it. I am strengthened in that belief by the numerous instances of the form مراتب occurring in 'Abdul-Karīm's text in the meaning of Sing, viz: p 43 l. 5: هر هفته دو مراتب; p. 43 l. 22: هفته یکمراتب; p. 47 l. 20: هر دو سال یک مراتب; p. 47 l. 21: چند مراتب; p. 70 l. 15: هر مراتب; p. 72 l. 2: چند مراتب; p. 79 l. 10: هر روز یک مراتب; p. 96 ll. 11-12: چند مراتب; p 108 l. 19: این مراتب فتح ازماست.—

*marīna* ( مرینه ) =P...... ? merino.—

*markab* ( مرکب ) =P. اولاغ donkey.—The word occurs in literature in the general meaning of "a mount". cf., however, the story of the "Selling of the Ass" in the Mathnavī (B:bay ed. 1318, p. 116 l. 17): مرکب خود برد و در آخر کشید where, it would seem, the word is used rather in the sense of "donkey" than "mount".—

***masāla*** ( مصالح ) = P. ساماں - اسباب materials (for building purposes, etc )—Should the word be used in P. (which I have never heard), it would naturally be pronounced correctly "*masālih*".—

***maska*** ( مسکه ) H. = P. کرّه butter.—cf. also I v T a b . p. 11 note.

***maškūr*** ( مشکور ) = P. متشکّر grateful:
*maškūr-am* "I thank you".—In P. مشکور, if ever used, could only mean "rewarded; compensated, indemnified", never "grateful".—

***mawāziāt*** ( OL. مواضعات ) = P. مواضع places. cf. for such double-plural formations *arākīn*, etc., also Introduction p. 16.

***mawrī*** ( موری ) = P. مروی and obs. مرورِی ' of Merv".—cf. Aw. *Mouru*-

***mawsūl*** ( موصول ) = P. واصل arrived; reached; received: AA موصول کردده است "has been received".—

***mayda*** ( میده ) H. = P. خرد - ریز reduced to powder; fine pounded; fine-ground: *ārt-i mayda* ( آرد میده ) and *tar-maydu* (ترمیده ? probably a mere transposition of the preceding) "flour; wheat flour; white flour".—

***maykrūskup*** ( میکروسکپ ) E. = P. ذرّه بین microscope.—

***maynūfaykčar*** (AA منیوفیکچر) E. = P. منو فاکتور (*manūfāktūr*) F.-R manufacture ---

***mazdūr*** ( مزدور ) obs. = P عمله workman.—Properly ***muzdūr***, *i.e.* مزد "remuneration" and suffix *-ūr* < *-var* < *āvar*, lit. "one [whose services are] remunerated" or "one who gets remuneration", cf. M o r g F r o n t., 274 b., where it is given in both forms. I have, however, not heard the correct form with *-u-* in K —

***mā bayn*** ( مابین ) = P درون - درمیان - میان in, inside: *mā bayn -i bāy* = P. درمیان باغ "in the garden". cf. also ʿA b d u l - K a r I m 's text, p. 38 l. 21: مابین بنگالهٔ بخانهٔ محبوس بود "he was imprisoned in a room inside of a bungalow" (S c h e f e r, p. 80 translates· "était renfermé dans le château de Bengalah," which does not render at all the Persian construction of the sentence, besides being altogether erroneous) —

In P. مابین means only "between" (for place) and "during" (for time). cf supra *bayn*.—

*mācis* ( ماچس ) E. =P. کبریت matches. Syn. *gūgird* q v.

*mādanī* ( معدنی ) =P. فلزّی in metal; made of metal —In P. معدنی (*ma'danī*) means "relative to mines,—to mining".—

*mājūr* ( مأجور ) =P. ممنون obliged: *AA.* این عطایای شان مأجور و مشکور بوده است "these gifts granted by her (the Queen) [were received] with gratitude and thankfulness".—In P. مأجور could mean (like *maškūr* q.v.) only "recompensed, paid, remunerated".—

*māl* ( مال ) =P. اسباب - سامان - جنس materials; goods.—In P. مال by itself means "a mule" (sometimes also "an ass" in the idiom of donkey-drivers), and has the meaning of "goods" only in compounds like مال التجارة.—

*mālam* (?....) =P. مرهم (*marham*) plaster.—i.e. *marham* > *malham* > *mahlam* > *mālam*, with the falling out of the *-h-* and the resulting compensatory lengthening (v. Introduction p. 7-9).—

*mālaq* ( معلق ) =P. معلّق (*mu'allaq*) somersault.—Whether any connection with *malak* "movement", etc MorgFront. 272 a, q v. ?

*mālī* ( مالی ) H. ? =P. حمّال bearer, porter. Cf. Morg-Front. 400 a.

*mālla* v. *mīla*

*māmā* ( ماما ) H. =P. دائی maternal uncle.—cf. MorgFront. 400 b.; MorgTexts 310, who takes it to be Prs., but v. Platts, s.v. In P. ماما means only 'midwife".—

*māmūlī* ( معمولی ) =P. مندرس - مستعمل old; worn out —In P. معمولی (*ma'mūlī*) means "usual, customary".—

*mānda* ( مانده ) =P. خسته tired. v. Introduction, p. 36.

*māndan* ( ماندن ) =P. گذاشتن to leave; to put, to place.—For details v. Introduction, p. 35-36.

*mārafat-i* ( معرفت ) H. =P. بتوسط or بدریعهٔ through the medium of; care of; by means of.—Also used with the preposition *ba-*. Probably borrowed from H. or *vice versá.*

*mārč* ( مارچ ) E. =P. مارس (*mārs*) F. March,

*māsūl* ( محصول ) =P. تعدید . حق - مالیات tax; toll, duty: excise:—

*māsūl-i gumruk* =P. حق کمرک "custom-duty";

*māsūl-i afyūn* =P. تعدید تریاک "excise on opium".—

*māyān* ( مایان ) = P. ما - ماها we (for many persons). v. Introduction, p. 21–22.

*māyyat-i* ( معیّت ) = P با - در خدمت - در رکاب with ; together with : AA معیّت ذات شاهانه "with His Majesty".—

*māz-i barāy-i* ( معض برای ) = P. (either) معض (or) برای for : AA. معض برای فیصله این مطلب "in order to settle this affair".—

*mēīn* ( مهین ) obs. = P. لطیف - باریک fine, subtle.—Superlative degree from مه - مهتر, nowadays obs. in Persia, but very current, though not in this sense in the older literary language in the Shāhnāma very often کهین و مهین "the lowly and the great".—

*mēla, mīla* ( مله ) H. = P. بازار a fair.—cf. Morg Front. 271 b.—

*mēmān* ( مهمان ) = P. مهمان (*mihmān*) guest: *mēmāndar* ( مهماندار ) "host, an officer appointed to act as host to foreign representatives".—cf. Morg Front. 272a and 400b.

*mīr* ( مهر ) obs. = P. محبت - عشق love, fondness.—

*mērbānī* ( مهربانی ) obs. = P. التفات - مرحمت kindness.— v. Introduction, p. 44

*mētar* ( مهتر ) H. = P کوت کش - کنّاس and کودکش night-workman ; scavenger ; sweeper.—The word *musālih* is, however, also largely used, q.v.

*mewa* ( میوه ) = P. میوه (*mīva*) fruit.—cf. Introduction, p. 5.

*misl-i az* ( مثل از ) P.= مثل like ... : *misl-i azū* = P. مثل او "like him" —

*mistrī* ( مستری ) H. = P استاد master.—A polite form of address, when speaking to artisans, cooks, etc. Borrowed from Port., *mestre* probably through the medium of H. Syn. *xalīfa* q.v

*mīting* ( میتنگ ) E.-R. = P. مجلس - جماعت meeting.—

*mīla* v. *mēla*.

*mīm* (sic!...... ?) H.=P. خانم lady : *du mīm az sifārat-i Birtāniyā āmada* "two ladies from the British Legation have come". Corrupted abbr. of the Anglo-Indian "mem-sahib".—

*mīta, mālta* ( مالته - میته ) H. = P. پرتوقال - پرتوغال orange.—

***mīzān*** ( میزان ) = P. جمع total: OL. میزان کل (*mīzān-i kull*) = P. جمع کل "grand total".—In P. میزان means "[exact] measure".—

***mudāxalat*** ( مداخلت ) = P. مداخله (*mudāxala*) concerning oneself with something; interfering; meddling.—

***mudīr*** ( مدیر ) = P. رئیس director.—
The word مدیر, though understood in Persia, is never used in P. and seems to have been borrowed from Turkey where it is a current official term in that meaning.—

***muhassil*** ( محصل ) = P طالب student.—Syn. *tālibu-l-ilm* q.v.

pl. ***muhassilīn***( محصلین ) = P. طلاب students.—

***muharaba-i azīm*** ( محاربهٔ عظیم ) = P. جنگ بین المللی the Great War.—Syn. *harb-i umūmī*, q.v. It is obvious that, contrary to P., no definite expression to denote the "Great War" has been established in K. The expression given here seems to be borrowed from T.—

***muīn*** ( معین ) = P. معاون assistant.—

***mukarraran*** (AA. مکرّراً ) = P. مکرّر repeatedly. cf. Introduction, p. 37–38.

***mumkina*** ( ممکنه ) = P. امکان possibility: *ba-qadr-i mumkina* ( بقدر ممکنه ) = P. حتی الامکان "as far as possible".—The K. word is naturally an adjective, and the construction is lit. "to the degree possible". cf. supra *makfī*.

***murč*** ( مرچ ) H. = P. فلفل pepper.—

***musālih*** ( مصالح ) = P. کنّاس - کوت کش or کود کش sweeper; scavenger; night-workman.—Syn. *mētar* q.v. The termination *-ih* is clearly pronounced, probably in order to avoid confusion with *masāla* ( مصالح ), v. supra.

***mušār ilayhi mazkūr*** ( مشار الیه مذکور ) = P. (either) مشار الیه (or) مذکور the above-named:
OL. تا مشار الیه مذکور به نقشه ها علم آورده الخ "so that the above-named, having acquainted himself with the plans, ......" etc.
Such and similar pleonastical expressions (cf. *amrāh-i bā*, *baray-i az*, *māz-i az*, etc.) are very current, and cannot always be attributed (as probably is the case here) to an incomplete understanding of the exact meaning of the A. expression used.—

*mušunk* ( مشنک ) ? = P. ماش green peas.—

*mutarajum* (sic !) = P. مترجم (*mutarjim*) interpreter, translator.— More often, however, *tarjumān*, q.v.

*muwaqqat* ( موقت ) = P. موقتی temporary —

*muxtasaran* ( مختصراً ) = P. (either) مختصر (or) بطور اختصار (or more seldom) اختصاراً in brief; in short; by way of abbreviation.—

*mūlī* ( مولی ) H. = P. (1) ترب horse-radish; (2) تربچه radish.— Same in Psht.

*mūnč* ( مونچ ) H = P......chopped rope (used for making a kind of cement for building purposes).—

*mūr* ( مور ) obs. = P مورچه ant.—Although widely used in literature (cf. Sa'di پای ملخ ,موری etc.) the word is not used colloquially by Persians, and would not be even understood, if so used.

*mur* ( مهر ) = P. مهر (*muhr*) seal.—

*murkan* ( مهر کن ) = P. حکاک engraver; dye-sinker.—

*mūsīča* ( موسیچه ) H. = P. فاخته - قمری turtle-dove.—Syn. *pāytak* q.v.

*mūtar* ( موتر ) } E. = P. اُتُو - اُتومبیل F. motor-car: موترکار هذا

*mūtarkār* ( موترکار ) } "this motor-car" (on a licence).—

*mūtarrān* ( موتررا ن ) } = P اتومبیلچی motor-driver.—
*mutarwān* ( موتروان ) }

The first of these two expressions is a literal translation of the E. term, its second link being the Imp. of the verb راندن "to drive". There occurs, however, even the expression AA. موتر درایور *mūtar-dirāywar*, which is a mere transliteration of the two E. words.—

*mūza* ( موزه ) obs. = P. چاکمه T. riding-boots.—

*mūzika* ( موزیکه ) R. = P. موزیک F. music; orchestra, band.—

## N

*nabad* ( ؟.... ) = P. نمد felt.—I have never come across the word in writing.

*nayz* ( نغز ) = P. باکه - نظیف - لطیف pure, fine, elegant: *yak nayz ādam būd* "he was a fine man". Cf. IvTab. p. 11;

I v B i r j . 341. The word is not used in P., but can be traced in literature: مصقلي نغز ديدم و روشن "I saw an assembly elegant and brilliant" (H ā t i f of Isfahan, Tarjī'-band, 3rd band, 2nd verse).—

***nal*** ( نل ) H. = P. لوله tube, pipe: *nal-i āw* "water-pipe" (for bringing water into houses).—From H.—S k r. ***nala***, v. P l a t t s s.v.

***nambar, lambar*** ( نمبر - لمبر ) E. = P. نمره (*numra*) F. number.

***nawāsa*** ( نواسه ) = P. نوه - دخترزاده - پسرزاده (obs.) grandchild.— 'A b d u l - K a r ī m has got نواسه in his text (once), but I am unable to retrieve my reference to page and line without perusing once more the greater part of his book, so I am leaving it at that. cf. M o r g T e x t s, 310 note; M o r g F r o n t. 277 b.; 403a; M o r g S h u g h. 61, and, more especially, M o r g V o c . 54.—

***nādan*** ( نهادن ) obs. = P. گذاشتن to place, to put: *binē da sar-i mayz* "put [it] on the table". cf. also I v B i r j . 265 l. 2 and note 1 on the same page.—Syn. ***māndan*** q.v.

***nāib-sālār*** ( نائب سالار ) = P. امیر تومان General.—

***nāibu-l-ukūma*** ( نائب الحكومه ) = P فرمانفرما Governor-General. In P. نائب الحكومه means "Vice-Governor".—

***nājūr*** ( ناجور ) H. = P. ناخوش unwell.—cf. M o r g F r o n t. 276a; 402a; M o r g S h u g h. 61.

***nāk*** ( ناك ) = P. گلابي pear.—cf. M o r g F r o n t. 276a; M o r g S h u g h. 61; R a v e r t y, s.v.

***nāl*** ( نهال ) = P. نهال (*nihāl*) young plant; sapling (not "tree" as L o r P h o n. 204b); cf. M o r g F r o n t. 275b.

***nālat*** (؟......) = P. لعنت (*la'nat*) curse.—cf. M o r g F r o n t. 402a. cf. *padarnālat* in the Introduction, p. 46 and s.v.

***nām*** ( نام ) obs. = P. اسم name: ***nām māndan*** "to give a name; to name" v. Introduction, p. 35.

***nām-nēk*** ( نام نيك ) = P. نامي famous; honourable.—

***nāma-nigār*** ( نامه نگار ) = P. وقايع نگار - خبرنگار correspondent (of a newspaper).—

***nā-mardak*** ( نامردك ) = P. نامرد (lit. "unmanly") a contented cuckold; a pimp; a pander.—A term of gross abuse in both languages, which certainly does not mean merely

"Unmensch, Taugenichts", as Salemann and Shukovski, Persische Grammatik p. 89 § 79. (Porta Linguarum Orientalium).

*nān* (نان) = P. غدا food.—Naturally also used to denote "bread", as in P.

*nār* (نهر) = P نہر (*nahr*)-جوی a stream; a rivulet.—More often *nār-i āw* = P. جوی آب "a stream".—

*nā-rāz* (ناراض) = P. ناراضی (*nā-rāzī*) dissatisfied, displeased.—

*nāryāl* (ناریال) H. = P. نارگیل H. cocoanut.—Both forms are of course Indian.

*nāšpāti* (ناشپاتی) H = P كلابی a pear; (metaphor. also) vulva—cf. Lor Phon. 189a; Morg Front. 277b.

*nēk, nēkō* (نیک، نیکو) obs. = P. خوب good.—

*niswār* (نسوار) H. = P. انفیہ snuff.—The correct form is probably *nāswār* (from H. *nās* "snuff"), as given by Raverty, s v., who also records the lightened form *naswār*. But, I have always heard *niswār* in Kabul.—

*niswār-i bīnī* (نسوار بینی) = P same as the preceding.—

*niswār-i dān* (نسوار دهن) = P. no equivalent, snuff-tobacco mixed with lime for chewing (a habit very current among the lower classes in Afghanistan).—

*niswār kardan* metaphor "to die".—

*nīlum* (نیلم) H = P. كبود یاقوت sapphire.—

*nuqra-ābī* (نقرہ آبی) = P لاجوردی - آبی blue —

*nut*, (vulg) *lut* (نٹ - لٹ) E. = P. اسكناس R. bank-note.—

*nuwambar* (نومبر) E = P نوامبر (*nuvāmbar*) F. November.—

*nūta* (AA نوطہ) ? = P. یادداشت note (diplomatic) —The word یاد داشت is, however, also largely used in K.—

## P

*padar-kalān, bāba-kalan* (بابا كلان - پدر كلان) = P. جدّ grandfather.—cf. MorgTexts, 310, note, who has, however, only *padarkalán* Hout Sch has got s.v. "*bâwā-kāl*, Grossvater", as Amarlū and Zenganeh Kurdish.—

*palān* (پلان) F. = P نقشہ plan; map.—

*palās* (پلاس) E. = P. گاز pincers; pliers.—Corr. of the E. "pliers".—

*palāstar-simant* (پلاستر سیمنٹ) E. = P. سمند (*samand*) cement-plaster.—

***palla-yi darwāza*** ( پلّۂ دروازہ ) H. =P. لای در fold of a door; leaf of a door.—From H. *pallā*.—

***paltan*** ( پلٹن ) E.-H. =P. باتالیون F. battalion.—Same also in Psht., cf. Raverty s.v. Probably a confusion of the E. "platoon" and "battalion". Is supposed to be a body of 1,000 men. cf. Morg Front. 279b.

***pančar*** ( پنچر ) E. =P. پنچر (*punčur*) E. puncture (of a motor-car tyre).—

***panja*** ( پنجہ ) =P. چنگال fork.—

***panj-kayk*** ( پنج کیک ) E. =P. .......... pancake.—

***panj-sad*** ( پنج صد ) =P. پانصد five hundred.—

***pansil*** ( پنسل ) E. =P. مداد pencil.—

***paraxča, paraxša, paraxta*** ( پرخچہ - پرخشہ - پرختہ ) =P. خاکۂ ارّہ - تراشہ sawdust; wood-shavings.—

***parīpūm*** ( پریپوم ) E. =P. تاوہ - طاوہ - طابہ - روغن داغ کن frying pan.—Also *pulīpūn*.

***partāw*** ( پرتاو ؟ ) =P. (Imp.) بگذار put down!—The word seems to be anyhow an Imp and to point to some lost verb *partāftan* "to put (to turn?) down".—

It is difficult to say, whether there is any real connection between our word and the P *part* [*šudan*] "to get dropped, lost" (which Lor Phon 183a considers to be "dialectic") unless the latter is a mere abbreviation of our word. As has been said, I have always heard it used as an Imperative: "throw [it] down!; let go!"

Its possible (if not merely outward) connection with the P. *partāb* ( پرتاب ) "bow-shot; arrow; ray (of the sun)" is also not clear.—cf. Iv Birj. 342.—Iv Rust 257.—

***parwā nīst*** ( پروا نیست ) =P. عیبی ندارد there is no harm; no fear.—cf. Morg Front. 281a —

***pasān*** ( پس آن - پسان ) =P. بعد از آن after that.—

***pasāpūrt*** ( پساپورت ) E. =P. تذکرہ passport.—But also پاس پورط (*pāspūrt*). Both forms occur in the headings of passports, visas, etc.

***pas-i*** ( پس ) =P. پی - عقب after:

*pas-i ū raftum* "I went to fetch him";
*pas-i kār-i xud* "[to attend] to one's (or his) own business".—

***patnūs*** ( پطنوس ) R. =P. سینی tray.—

***pawdar*** ( پودر ) E. =P. باروت [gun-] powder.—

***paxta*** ( پخته ) =P. پنبه cotton ; cotton-wool —

***paydāwār*** ( پیداوار ) =P. حاصلات - مواد produce :
AA. برای تعریف پیداوار افغانستان سیار کمک میکند " it is of great help for [establishing] an estimate of the productivity of Afghanistan " ;
AA مواد پیداوار افغانستان " the raw materials produced in Afghanistan ".—

***paymāyiš kardan*** ( پیمایش کردن ) =P. اندازه گرفتن to measure.—

***payra*** ( پهره ) obs. =P. کشیکچی - کشیک - قراول guard ; watch ; watchman.—cf. Morg Front. 280 b. Unknown in P.—

***paysa*** ( پیسه ) H. =P. پول (1) name of the smallest coin (1/60 of a Kabuli rupee) ; (2) money.—cf. my "Afghan Weights and Measures" JASB, Vol. XXIV, 1928 No. 4, p. 424 ; also Morg Front. 281 b —

***payzār*** ( پیزار ) =P. کفش slippers ; footwear.—An abridgment of the obs. پای افزار lit. " tool for feet ".—

***payzāra*** ( پیزاره ) =P. . . . . . .cornice —

***pazīrānīdan*** ( پذیرانیدن ) =P. بقبول مجبور کردن to make accept ; to force upon.—Syn *qabūlānīdan*, q.v.

***pā-bar-jā*** ( پا برجا ) =P. معتبر respectable.—Lit. " having the foot on the place ", i.e. " firmly established " —

***pāylak*** (? . . . . .) Psht. =P. فاخته (*fākhta*) turtle-dove —

***pā-juwāl*** ( پا جوال ) =P. مزد آسیا the miller's fee (for grinding corn).—

***pākī*** ( پاکی ) H. =P تیغ or دلاکی تیغ razor.—cf. Morg Front. 403 b

***pālak*** ( پالک ) H. =P. اسفناج spinach.—From H., v. Platts, s.v

***pālīdan*** ( پالیدن ) =P. جستجو کردن - پی چیزی گشتن to search, to look for. *mēpālum* " I shall look (for it) ". Does not exist in P. Morg Front 279 b marks it down as Ind., but gives it with a short *-a-* : " *pal-*. *pa'lī-* to walk about (*gaštan*) " —

***pālisī*** (AA. پالیسی) E. =P. مسلک policy.—

***pālū*** ( پهلو ) =P. پهلو (*pahlū*) side.—cf. " *palune* " in Iv Birj. 283 No 38, also ibid. 248, last paragraph. With regard to the incremental final *-n* cf. Introduction, pp. 10–12.

*pān* ( پهن ) = P. پهن (*pahn*) broad, wide cf. H o r n , 34.—

*pāntar* ( پهنتر ) comp. degree of the preceding.—

*pāsux* (AA. پاسخ) obs = P. جواب answer, reply.—

*pātlūn* ( پاتلون ) E. = P. شلوار - شالوار trousers.—cf. M o r g F r o n t. 405a.

*pāyataxt* ( پایه تخت ) = P. پایتخت (*pāytaxt*) capital: AA. در وین پایه تخت آسٹریا "in Vienna, the capital of Austria".—

*pāyān* ( پایان ) = P. پائین *pāyīn* below; down, downwards; lower.—Both forms occur indiscriminately in 'A b d u l-K a r ī m's text: p. 52 l. 18: نظر بپایان چاه میکرد—but on p. 73 l. 6: پائین آب بکمنزل راه رفته بودند and again p 105 l. 13: به پایینست.—I do not find *pāyīn* in Md. A m ī n's text, where *pāyān* occurs twice: T 270 l. 9 and 305 l. 33-34 (note).—In K., however, only *pāyān* is used, which, in its turn, is entirely unknown in P.—

*pāy-gurīzī* ( AA. پای گریزی ) = P. گریزپا (*gurīz-pā*) fleeting, unstable —

*pēš* ( پیش ) = P. پیش (*pīš*) before.—And yet *pīšīn*, q v.

*pēšāw kardan* ( پیشاب کردن ) H. = P. ادرار کردن - بول کردن to pass urine —

*pēšbandī* ( پیش بندی ) H. = P. جلوگیری prevention, foresight: AA. چه برای فیصلهٔ وافعات سابقه و چه برای پیش بندی وقوعات آینده "both in order to settle the previous happenings and to prevent the [occurrence of any] further incidents" —
In P. پیش بندی could naturally be understood only as an adjective from پیش بند "apron".—

*pin* ( پن ) E. = P. سنجاق pin: C. پن نگینه‌دار هر قسم "any kind of pins with glass-heads".—

*pinjāh* ( پنجاه ) = P. پنجاه (*panjāh*) fifty.—

*pirān* v. *pīrān*.

*pišak* v. *pišak*.

*pišk* ( پشک ) = P. قرعه lot (-drawing, in connection with military service).—The word پشک is used in P. in a similar meaning, but only by children in certain games requiring the drawing of lots.—cf. also M o r g F r o n t. 282a.—

*piyāla* ( پیاله ) obs. = P. فنجان tea-cup; coffee-cup.—In P. the obs. پیاله means "wine-cup", if anything.—

*pirān, pirān* ( پیراهن - پیرهن - پراهن ) = P. پیراهن (*pīrāhan*) shirt.—

*pišak, pišak* ( بشک - بیشک ) = P. گربه cat.—In P., when speaking to small children, the cat is sometimes referred to as پیشي (*piši*) or پیش پیشی (*pišpiši*), i.e. "Pussy". One also calls a cat in P. by means of repeating the sound "*piš-piš*" = E "puss-puss".—

cf. IvKurd. p. 231; "*pesing*"; IvTab p. 11 note پیوشک; Geig. 356. Gil. *piča-māde* "die weibl. Katze"; LorPsht. pp 206, 207a and 354 a پیشو *pishū*, whereas Raverty, s.v. and Vaughan s.v., have only *pishū*; LorPhon 183 b. has got *pušūk*, and 199 a *pušuk*; MorgFront 282 a has *pi'šak*. The word seems thus to have, both in K. and Psht. (I omit here the variants of Kurd. forms of the word recorded by HoutSch p. 56) forms, in which the quality and quantity of the vowel-sounds seems to be of an oscillating character.—

*pišin* ( پیشین ) = P عصری in the afternoon. Also *namāz-i pišin* (or simply *pišin*) = P. نماز عصر "afternoon-prayer".—But *pēš*, q v —

*pōsta* ( پوسته ) = P. پست (*pust*) Post: *idāra-i pōsta* ( اداره پوسته ) = P پستخانه "Post-Office".—Syn. vulg. *dāk*, q.v.—

*puf kardan* ( پف کردن ) = P. فوت کردن to blow, to blow out (a light).—

*punduk* ( پندک ) Psht. = P. غنچه flower-bud; (metaph.) pudendum of a young girl.—Prob. fr. Psht. *pandūk*.—

*purōgrām* ( پروگرام ) E. = P. پروگرام (*purūgrām*) program.—Also an A. plural-form from the same: AA. پروغرامات *purō-grāmāt* "programs, schemes, plans".—

*pura* (erroneously also) *pūra* ( پره - پوره ) = P. کاملاً completely, fully.—

*purza* ( پرزه ) H. = P تکه - پارچه piece; scrap; bit, chip.—

*pušt* ( پشت ) = P عقب after: *puštaš mērūm* ( پشتش میروم ) "I am going to fetch him".—Syn. *pas-i*. q.v.

*put* ( پت - پط ) = P. قایم hidden, concealed: *put kardan* "to hide to put by".—From Psht. پټ *puṭ* "hid, hidden".—

*puhūnis* ( پروهش ) obs. = P. تحقیق - رسیدگی examining, studying (a question):—

*AA.* پژوهش احوال ملت "an enquiry in the circumstances of the nation".—

*pūda* ( پوده ) = P پوسیده rotting, rotten. Both Steingass and Raverty give it as Persian, but I have not heard it

in P., and the word is certainly not a literary one.— cf. I v B i r j. 342 "*pidū* (= LP. *pusīda*?) rotten".—

*pūndīdan* ( بوندیدن ) = P. باد کردن to swell.—Probably fr. P s h t. پنډېدل *punddedal* "to expand, to swell".—

*pūpak* ( پوپک ) P s h t. = P. منگوله a tuft, a tassel.—Prob. fr. P s h t. پوپکه *pūpaka'h* "a bump, a swelling, a protuberance".—

*pūšāk* ( پوشاک ) = P. لباس clothes, clothing.—

*pūlaynd* (AA. پولیند ) E. = P. لهستان Poland.—

*pūra* v. *pura*.

Q

*qablibarīn* (AA. قبلبرین ) = P. قبل از این or من قبل before; before that.—

*qabūlānīdān* ( قبولانیدن ) = P. بقبول مجبور کردن to make accept.—v Introduction, p 32. Syn. *pazīrānīdan*, q.v.

*qalamī* ( قلمی ) = P. خطّی manuscript: *kitāb-i qalamī* "manuscript", as opposed to کتاب چهاپی (*kitāb-i čihāpī*) "a printed book".—

*qanāwīz* ( قناویز ) = P. . . . . . a kind of silk cloth.—

*qáraz* ( قرض ) = P. قرض (*qarz*) loan, debt.—

*qarīban* ( قریباً ) = P. (either) تقریباً (or) قریب (the latter with an i ẓ ā f a) nearly; almost; approximately: AA. قریبا هشت صد نفر "nearly 800 men".—

*qaryadār* ( قریه‌دار ) = P. کدخدا "alderman"; chief of a village.—

*qátal* ( قتل ) = P. قتل (*qatl*) murder.—v. Introduction, p. 14.

*qatār-i āhīn* ( قطار آهین ) = P. ترن or ترن راه آهن railway-train. lit. "iron-convoy". Syn. *layr*, q.v.

*qawlānīdan* ( قولانیدن ) = P. قول دادن to promise:

AA. قولانیده نمیتوانستند "they were unable to promise". cf. also supra *qabūlānīdan*. v. Introduction, p 32.

*qayza* ( قیزه ) = P. دهنه horse-bit; bridle. cf. P s h t. قیزه "watering-bridle" (R a v e r t y, s.v.) (= P. دهنهٔ آبخوری).

*qālīn* ( قالین ) = P. قالی carpet.—

*qāq* ( قاق ) = P. خشک کرده - سفت کرده dried; hardened, made stiff:

*gūšt-i qāq* = P. گوشت یخ شده "frozen meat";

*nān-i qāq* = P. نان خشک "dried bread"; biscuit;

*pīrān-i qāq* = P. پیراهن آهاری "boiled shirt";
*kōlar-i qāq* = P. یوقل آهاری "a stiff (starched) collar".—
cf. Br Dial 822 "کاکی 'bread'" (quoted from a poem by Abū-Ishāq) cf. IvBirj. 342 "*qoq*, a sort of bread", Lor Phon. 176b.; Morg Shugh. 57.—cf. also Horn, p. 6, *kāk* "eine Art Brot".—I make bold to suggest that the word does not mean "bread", but is an adjective meaning "[artificially] dried" (or "hardened") —

*qīmat* ( قیمت ) = P. گران dear, expensive: *ī as qīmat as* ( این اسپ قیمت است ) "this horse costs much,—is expensive".—One of the many instances of the so current in K. use of a noun in the meaning of an adjective.—

*qulāč* ( قلاچ ) T. = P. بغل fathom. cf. my "Afghan Weights and Measures" p. 421.

*qulba* ( قلبه ) = P گاو آهن a plough:

*qulba kašīdan* = P شُخم زدن "to plough, to till".—
In P. قلبه means "a furrow [made by the plough]", not the "plough", in spite of Steingass, s v. cf. also Lor-Phon 176b "*qalwā*, plough", etc.—

*qurūt* ( قروت ) T. = P. کشک curds.—cf. Morg Front. 267a.

## R

*rajistarī* ( رجستری ) E. = P سفارشی registered (letter).—

*rang* ( رنگ ) = P. (1) مرکّب ink; (2) واکس R. boot-polish (for the latter also *rang-i būt*).—

*rang-i ābī* ( رنگ آبی ) = P........water-colour (as opposed to "oil-paint")—Does not mean "blue" (as in P.) for which v. *nuqra-ābī*.—

*ranjūr* ( رنجور ) obs. = P. مریض sick; ill.—

*rasīdāt* ( رسیدات ) = P. رسیدها . رسید receipts: کتاب رسیدات تلگرامات "peon's book of the Telegraph-Office".

The P. word رسید itself in the above meaning might be, for all we know, a mere adaptation (or transliteration) of the E "receipt"—

*rawanda* ( رونده ) = P. عازم going; departing; directing oneself:—
OL. هوانازِ رونده فرانسه (sic!) طلاب "airmen going to France for training".—

*rawāk* ( رواک ) = P. کشو drawer (of a desk, of a chest of drawers).—

*rayl* ( ریل ) E. = P. ترن F. train: AA. ریل مخصوص "express-train".—A misapplication of the E. "rail"; also *layr*, q.v. Syn. *qaṭār-ı āhin* q.v.

*rābar* ( رهبر ) E. = P. رزین R.-کش india-rubber.

*rākūl* ( راکول ) = P....... a harrow.

*rārawī* ( راهروی ) = P. راهرو (*rāhrāw*) passage, corridor.—cf. supra *pā-gurīzī*.

*rāsipār* ( رهسپار ) = P. روانه going; being sent.—

*rāy kardan* ( راهی کردن ) = P. فرستادن to send.—cf. Iv Birj. 255 note 2; Morg Front. 284a.—

*rijmint* ( رجمنت ) E. = P. فوج regiment.—

*rikābī* ( رکابی ) H. = P. نعلکی saucer.—cf. Lor Phon. 204b "*rikābī*, dish".—

*riwāš* ( رواش ) = P. ریواس rhubarb.—

*rizā šudan* ( رضا شدن ) = P. راضی شدن to agree, to accept.—cf. also *safā kardan*.—

*rīspān* ( ریسپان ؟ ) = P. ریسمان rope.—Used in current speech in preference to the P. form. I have not, however, seen it in writing. Occurs also in vulg. speech in P.

*rīziš* ( ریزش ) = P. زکام cold in the head.—

*rubāt* ( رباط ) obs. = P. کاروانسرای caravansera.—

*rujū ba* (OL. رجوع به ) = P. راجع به with reference to........ cf. *rizā šudan*, *safā kardan*, *qīmat*, etc.

*rux dādan* ( AA. رخ دادن ) = P. روی دادن to appear; to arise; to occur, to happen.—The expression is used in K. along with the usual P. form.—I find one instance of it in 'Abdul-Karīm's text, p. 85 l. 6: جنگ رخ داد.—

*ruxsat*, (vulg.) *rusxat* ( رخصت ) = P. (1) مرخّصی leave; (2) مرخّص allowed to depart; (3) خاموش gone out (fire) [Syn. *gul*, q.v.]: *ātaš ruxsat šuda* "the fire is gone out";

*ruxsat šudan* = P. مرخّصی کردن "to get leave";

*mā ruxsat?* = P. بنده میخواهم مرخّص شوم or بنده را مرخّص میفرمائید؟ "may I go?" "allow me to go".—

The word occurs in 'Abdul-Karīm's text once, p. 17 l. 13, and twice in Md. Amīn: T. 345 l. 23 and 358 l. 21.—

In P. a compound verb with شدن demands, as the first link in the combination, an adjective or (and that mostly)

an A. passive participle. K., however, allows (or, should we say, encourages) the use of **abstract nouns** in such compound verbs—cf. **Morg Front.** 285b.; also **Morg Texts**, 311, ll 3, 6; 315 l. 3 etc.

***ruxsatī*** ( رخصتی ) = P. تعطیل holiday; vacations.—Syn. *čōṭī*, q.v

***rūnumā šudan*** ( رونما شدن ) = P. روی دادن - عارض شدن to take place; to originate: AA. مجادله در بین افغانستان و برطانیه رونما شد "a conflict arose between Afghanistan and England".—Syn. *rux dādan*, q.v.

***rūydād*** ( رویداد ) = P. صورت مجلس proceedings: رویداد لوی جرگه "proceedings of the Lūy-Jirga" —

## S

***sabaq*** ( سبق ) H; T = P. درس lesson.—The word, although good A. and occurring occasionally in Persian literature, is unknown in P., but is exclusively used for "lesson" both in Afghanistan, in India and in Turkey.—cf. also **Morg Front.** 286b —

***sabāh*** ( صباح ) = P. (1) فردا to-morrow; (2) صبح [in the] morning

It is an abridgment of the A. علی الصباح "on the morrow". Under the influence of P the word *fardā* has also (quite recently) made its appearance in K, but it is used in a most inappropriate way, mostly in the meaning of "this morning", in sentences like "*fardā rafta anūz nayāmada*" "he went this morning (lit, to-morrow), (but) has not yet come back".—

It occurs many times in **'Abdul-Karīm's text**: p. 17 l. 2; p 20 l 18, p 24 l 15; p. 34 l. 16; p. 50 l. 12; p. 52 l. 4; p. 56 l 11; p 61 ll 7, 12; p. 68 l 18; p. 69 l. 6, p. 74 l 16, p 81 l 8—cf. **Morg Front.** 286a; 406a.—

***sadā kardan*** ( صدا کردن ) = P در رفتن to go off (of firearms).—

***safar-xarj*** ( OL. سفر خرج ) = P. مخارج سفر travelling-expenses.—

***safā kardan*** ( صفا کردن ) = P. پاک کردن to clean.—cf. also supra *rizā šudan*.—The use of صفا (i.e., صاف ) in the meaning of "clean" might be due to the influence of H. In P. [ صفا ] صاف means "clear" (of liquids), "transparent" (of glass, precious stones, etc.), even;—صاف کردن means in P. "to

clarify", never "to clean" (not even when speaking of window-panes and the like).—cf. MorgFront. 287a "*sāf*, clean, clear, in order".—

*safīr muxtār* (sic: AA. سفیر مختار) = P. وزیر مختار Minister Plenipotentiary.—

*sakka* ( سکّه ) H. = P. تنی blood-relation: [*birādar-i*] *sakka-i ma* "my own brother".—From H. *sagā* "own; full; whole-blood". *sagā-bhāī* "own brother" (Fallon, s.v.)

*salāsūm* ( سلاسوم ) T. ? = P. وشق lynx.—

*samāruq* ( سماروق ) = P. قارچ mushroom.—Dictionaries (Steingass, Platts, Bianchi) give سماروغ as Persian, but I have never heard it in P.

*sanādīq* ( صنادیق ) = P. صندوقها chests; boxes.—Very current in ordinary K. speech.—

*sandalī* (صندلی) = P. کرسی "a kursī" (a contrivance for keeping warm in winter common to Persia and Afghanistan, consisting of a chafing dish placed under a low square-shaped table covered with a huge square counterpane under which all the inmates of the house sit by daytime huddled up to their chins, and sleep by night with their feet converging towards the common centre of warmth—the chafing-dish) —cf supra *čawkī*.—

*sangbāqa* ( سنگ باقه ) = P. لاکپشت or (less common) سنگ پشت tortoise.—Lit. "stone-frog".—

*santara* ( سنطره ) H = P. نارنگی tangerine.—

*saptambar* ( سپتمبر ) E = P. سپتامبر (*saptāmbar*) F. September.—

*sarak* ( سرک ) H. = P. راه - خیابان road, avenue: *sarak-i puxta* "a causeway".—

The word seems to be borrowed from H. سرک or سڑک "a continuous line of road, road, high-road, highway" (Platts).—

Our word has probably no connection with the word سرک quoted IvTab. 24 note 1, as used only in the expression "*sārak kāshidān* in the sense of 'to spy, to watch stealingly' in Fars".—

*sardāw* ( سرداب ) = P. آب انبار underground reservoir for drinking-water.—

*saryūč* (OL. سرغوچ ) R. = P. لاک sealing-wax.—

*sarkārī* ( سرکاری ) H. = P. دولتی governmental, belonging to the government —In Md. Amīn's text, as quoted by

**Teufel**, the word سرکار occurs twice: T. 296 l. 13 "Fiscus (سرکار)" and 329 l. 5 "سرکار Domänenkammer".—cf. also Morg Front 288b.

*sar-kātib* (سرکاتب) = P نائب اوّل - منشی باشی head-clerk; First Secretary (of a Legation) —The compound seems to be of recent origin and probably borrowed from T.—

*sarmayzī* (سر میزی) = P. رومیزی (*rūmīzī*) - سفره table-cloth.—

*sar-muallim* (سر معلّم) = P رئیس مدرسه headmaster (of a school) —The word seems to be a translation fr. E. unless it is a formation on analogy with *sar-kātib*, q.v.

*sar-tabīb* (سر طبیب) = P. حکیم باشی [head-] doctor.—

*sawdā* (سودا) obs = P. اجناس - جنس goods: *sawdā kardan* "to sell".

*sawf-i narī* (C صوف نخی) = P. نخ نشمی knitting wool.—

*sawq numūdan* (سوق نمودن) = P. روانه کردن - فرستادن to send.—

*sawza* (سبزه) = P. سبزه (*sebze*) lawn, field —

*sayl* (سیل) = P تماشا sight; sight-seeing: باد داشت سیل بینی (heading of a hand-bill) "program of the recreations" (in Paghman) A corruption of the A. سیر. In P. the word (though seldom used) would be understood as "taking a walk".—

*sābiq az-īn* (AA. سابق از این) = P. سابقاً - تابحال formerly; before now.—

*sāč* (ساچ) = P. سار starling.—

*sālan, sālān* (سالن - سالان) E. = P. سالاد (*salād*) salad.—A corruption of the E. word Prob. through H.—

*sān* (صحن) = P. چلوار shirting.—

*sārī* (سحری) = P سر آفتاب at dawn: *ma sārī āmadum* "I came at dawn".—Lor Phon. 186a has got "*saᵉr*, morning"; cf. also Morg Front. 288a; 407a —

*sāzanda* (سازنده) obs = P. سازگر - نازن musician —

*sigrit* (سگرت) E. = P. سیگار cigarette.—Syn. *čurut*, q.v.

*silāhandāz* (سلاح انداز) = P. تیر انداز skirmisher.—cf. Md. Amīn: T. 312 l. 5. سلاح در برگرفته and 338, last line (note) سلاح طلبید.—The word سلاح is no more used in P., where its plural-form اسلحه is, however, current.—

*silīpar* (سلیپر) H -E. = P. کفش slippers: C. سلیپر کلان پای مردانه

"large size slippers for men".—Applied only to slippers of European make, as opposed to *būt, čaplī, jūtī, mūza*, q.v.

*sipāh* ( سپاه ) obs. = P. سرباز soldier.—
In P. the obs. word سپاه could mean "army" (for which, however, nowadays only the T. word قشون is used in P.), but could not be used to denote individual soldiers. Md. Amīn uses the word in both meanings: T. 298 l. 6; 321 l. 36; 329 l. 15; 334 l. 4; 360 ll. 5, 6, 14; 364 l. 13; 371 l. 5.—The word does not occur in 'Abdul-Karīm's text.—

*sisad* ( سه صد ) = P. سیصد (*sīsad*) three hundred.—

*sīm* ( سیم ) = P. مفتول wire.—The word سیم, although occurring in P. in certain combinations like سیم تلگراف "telegraph-wire" تلگراف بیسیم "wireless", is not applied to ordinary wire used as material, when the word مفتول is generally applied The latter, however, seems to be altogether unknown in K.—cf. Morg Front. 287b.—

*sīmgil* ( سیم گل ) ? = P......clay-plaster.—

*sīsī* ( سیسی ) = P, دبهو a (kind of) partridge —

*sučča* ( سچّه ) H.-Psht. = P. اصل real, original.—From H. through Psht. (or independently), where, according to Raverty, who gives the word as سچ *suc̱h* or سچه *suc̱hach*, it means "pure, undefiled, unpolluted, clean, unadulterated, without flaw". It is, however, used both in ordinary K. speech and in C. in the sense of "the real article", as opposed to *jūta* ( جوته ) "imitation".—

*sufayd, sufēd* ( سفید ) = سفید (*safīd*) white.—

*sukuštan* v. *šukustan*

*sulaymāniya* ( سلیمانیه ) = P. هدهد hoopoo —

*surā'ī* ( صراحی ) obs. = P. تنگ - کوزه jug —

*surx* ( سرخ ) = P. (1) قرمز red; (2) داغ hot: *āb-i surx* = P. آب داغ "hot water" In P. the word سرخ is used along with قرمز, with that subtle difference that the latter denotes an inherent or natural redness, whereas the former is used with reference to an accidental or artificial redness: مرکّب قرمز "red ink", but صورتش سرخ شد "his face became red, he blushed"; سیب سرخ "a red apple". The word قرمز seems to be unknown in K.—

*sutra* v. *sūtra*

*sūb* ( سوب ) E. = P سوپ soup.—

*sūča* ( سوچه ) Psht. = P. لطیف - نظیف - پاک clean; pure; fine.—cf. Raverty, s.v.—

*sūdxur* ( سود خور ) = P. ربا خور usurer.—

*sūn* ( ?....) = P. سو (*sū*) side.—cf. IvBirj. 280 No 30 l. 1 and note 1.—v. also Introduction, p. 11.

*suriya* ( سوریه ) = P. شام Syria.—

*sūtra. sutra* ( ستره - سوتره ) H. = P. نظیف - پاکیزه - پاک clean; tidy; pure.—Fr. H. ستهرا *suth'rā* "neat; tidy; clean; clear" (Fallon s.v.).—

## Š

*šabīna* ( شبينه ) = P. شبانه nightly; at night.—

*šaftālū* ( شفتالو ) = P هلو peach —In P. the word means a kind of apricot.—cf. MorgFront. 289 b, MorgShugh. 68.—

*šámā* ( شمع ) = P. شمع (*šam'*) light; candle.—

*šamāl* ( شمال ) = P. باد wind.—In K. *šamāl* does not necessarily mean "northern [wind]" (as it would in P., where it could not be used without the word باد prefixed to it), and is used with reference to "wind" or "strong wind" in general, irrespective of its direction.—cf. also Md. Amīn: T 365 l. 10; IvBirj. 286 No. 51, 287 No. 53, etc.

*šanawāndan, šnawāndan* شنواندن = P. منتشر ساختن - انتشار دادن to make heard, to spread abroad, to divulge; to announce, to declare: AA نشنده و شنوانده ایم "we have neither heard nor published (any such thing)".—

*šarmīdan* ( شرمیدن ) = P. خجالت دادن to put to shame; to make ashamed.—

*šaršam* ( سرسم ) = P ....turnsole-seeds.—

*šaš* ( شش ) = P. شش (*šiš*) six —

*šawbāšī* ( شب باشي ) = P. بسر بردن شب passing the night; staying for the night: OL چه در صورت شب باشي وزارت خارجيه نيستكه جاى مناسب را ندارد الخ "for should they stay for the night, the Foreign Office, etc.".—

*šax* ( شخ ) = P. سخت - سفت hard, firm.—cf. Raverty, by whom it is given as Persian on p. 646 b, but as Psht.

on p. 678 : " شخ *shakh* or *khakh*, adj. stiff, hard, not easily bent", etc. Steingass, s v. gives "hard ground, especially on the summit or at the skirt of a mountain; anything hard; a mountain; the nose of a mountain; a promontory", etc. LorPhon. 202a has got "*šax*, cliff, slab of rock (=*taxt-i sang*)".—

*šābās* ( شا باس ) H. =P. آفرين - بارك الله bravo! also *ay šābās* in the same meaning.—An Indian corruption of the Persian شاد باش, not used in P.— cf. MorgFront. 289 b.—

*šādī* ( شادی ) =P. ميمون monkey.—Prob. fr. Psht. شادو (*šādū*).—

*šāγāsī* (sic: OL. شا عاسی ) =P. اشيك آقاسی (*išik-āγāsī*) chief usher; master of ceremonies.—A mere corruption of its P. equivalent.—

*šākāsa* ( شاه كاسه ) =P. تشت - طشت large basin; wash-tub.—

*šāndan* ( شاندن ) =P. نشاندن to make sit; to put, to place; to plant: AA. قطعة زمينی برای ساندن نهال (*qiṭa-zamīnī baray-i šāndan-i nāl*) "a plot of land for planting saplings".—Causat. fr. *šištan*, q.v.

*šāt* ( شهد ) obs. =P. عسل honey.—v. Introduction, p. 9.

*šāxī* ( شاخی ) =P. سه شاخه pitchfork.—

*šēr*, *šīr* ( شير ) =P. ببر tiger. v. Introduction, p. 6.

*šērdān* ( شيردان ) =P. شير (*šīr*) tap.—

*šifā-xāna* ( شفا خانه ) H. =P. مريضخانه hospital.—

*širkatu-t-tijāra* ( شركة التجارة ) T. =P. شركت تجارتی a commercial firm.—

*šištan* ( ششتن ) =P. نشستن to sit: *da dukān šišta* "he is sitting in (his) shop".—Imp. *šin* and *niš*.—cf. IvRust. 255; LorPhon. 187a; 202 b.—

*šīr* v. *šēr*

*šīrjūšak* ( شيرجوشك ) =P. پستانك feeding-bottle: C. رهبر شير جوشك (*rābar-i šīrjūšāk*) =P. نوك پستانك "indiarubber teat".

*šīryax* ( شيريخ ) =P. بستنی ice-cream.—Prob. a mere translation fr. E.—

*šīšam* ( شيشم ) H. =P. ..........the tree Dalbergia sisu and its wood (much used in manufactures) (Platts).—

*štabrī*, *ištabrī* ( اشتبری - شتبری ) E. =P. توت فرنگی strawberry.—Also *tūt-i štabrī*, where the prosthetic *i-* disappears owing

to the presence of the i ẓ ā f a, which helps the articulation of the word.—

*šukur kašīdan* ( شکر کشدن ) = P. تشکر کردن to thank; to be thankful: AA. شکر مکشم "I am thankful".—

*šukustan. sukuštan* ( سکشدن - شکستن ) = P. شکستن (*šikastan*) to break —

*šumār kardan* ( سمار کردن ) obs. = P. حساب کردن to count.—

*šumāyān* ( سمایان ) = P. شما - شماها you (when addressing several persons). v. Introduction, pp. 21–22.

*šūar* ( سوهر ) = P. سوهر (*šawhar*) husband But L o r P h o n. 187a; 202b gives '*šauhar*'; cf. also M o r g T e x t s, 310 "*šawar*, husband".—Syn. *šūy*, q v.

*šūr* ( شور ) = P. مشورت deliberation discussing (a question).—

*šūrānīdan* ( شورانیدن ) = P. بشورش تحریک کردن to make revolt; to incite to revolt · AA. این قبایل را برصد حکومت سورانیده است "he had incited those tribes to revolt against the government".—

*šurīdan* ( سوریدن ) obs. = P. شورش کردن to revolt.—

*šuy* ( سوی ) obs = P. شوهر husband —The word is more current in K. than its synonym *šūar*, q v, cf. M o r g T e x t s, 314 l. 6, 315 l. 4, etc.—

## T

*tab* ( تب ) E. = P. طشت حمّام tub —

*tabarča* ( تبرچه ) obs. = P. تیشه axe, hatchet.—cf M o r g F r o n t. 410a "*ta'bar* 'axe'" —

*tabāšīr* ( تباشیر ) H. = P. سفید گل - گچ chalk. S k r. *tvakšīra* "sugar of bamboo" ( S t e i n g a s s ). "manna of bamboo" ( P l a t t s ) —The word occurs once also in M d. A m ī n's text: T. 364 l 18 بهاب تباسیر صنع;—Entirely unknown in P.—

*tabīat* ( طبیعت ) = P. حال - احوال health.—Same in H. In P., however, the word means only "temper; character". v. Introduction, p 44.

*tahāna* ( تهانه ) H = P قلعه a small fort; the head station of a district.—From H. *thāna*.—

*tajrūbadārtar* (OL. تجروبه‌دارتر ) = P بیشتر با تجربه - مجرّب تر more experienced.—

*taklīf* ( تكليف ) = P. زحمت trouble.—In P. the word means "duty; what is incumbent; what must be done" تكليف چيست؟ or, by way of abbreviation تكلف؟, is an expression often occurring in P. as a concluding formula in telegrams: "what is to be done?" or "what have I to do?" cf. also Phillott, Preface.—

*talabistan* ( طلبستن ) = P. خواستن to summon; to order (goods): *talabistum az bāzār* "I have ordered (it) from the bazar".—The form *talabīdan* ( طلبيدن obs. in P.) is also currently used. The expression *talab kardan* ( طلب كردن ) means in K. as in P. "to claim" (money, a debt, an indemnity, and the like).—Only the form طلبيدن occurs in our two Tāj. authors: 'Abdul-Karīm p. 60 ll. 3, 7; Md. Amīn T. 363 l 19—cf. LorPhon. 180b who has got only "*talabīd*:—(*talab*?) to demand, seek in marriage", etc.—cf also Morg Front. 294a.—

*tala kardan* ( تله كردن ) H = P. از جا بر داشتن to push · to push off, to remove.—Prob. from H ٹلنا cf Platts s.v —

*talak* ( تلك ) = P. تله a trap (as mouse-trap, rat-trap ).—

*talaskūp* (AA. تلسكوپ ) E. = P. دور بين telescope.—

*talāw* ( تلاب ) H. = P. حوض - استلخ pond, cistern.—

*tanxāh* ( تنخواه ) = P. مواجب salary: *tanxāh xurdan* = P. مواجب گرفتن to receive a salary".—In P. تنخواه means "goods".—Md. Amīn T. 329 l. 11 has got: اراضه (sic) و تنخواه "Grundbesitz and Lehn"—'Abdul-Karīm's text does not contain the word, but has in one instance the verb *xurdan* in connection with the P. equivalent of تنخواه: p. 9 l. 19 مواجب ميخورد; also in the same meaning p 106 l. 18: ملوفهخوار بودند "they were receiving rations".—cf. Morg Front. 294b "*tan'-xâxūr* (sic!) 'drawing pay'".—

*taqarrur* ( تقرّر ) T.? = P. تعيين - مقرّري - مقرر شدن appointment, being appointed: AA. ٣ تقرّر حكّام درجهٔ "appointment of governors of the 3rd class".—

*tarangan* ( ترنگن ) Psht. = P. طور كاه كشى net (for carrying straw, hay, etc., on donkeys).—Fr. Psht. ترنگر *trangarr.*—cf Morg Shugh. s v. "*teráng* 'girth", etc.

*tarbūz* ( تربوز ) H. = P. هندوانه water-melon.—cf. Morg Shugh. p. 71.—

***tarixī*** (OL. تاریخی) = P. .. مورّخهٔ dated .... In P. تاریخی means only "historical".—On the other hand, one finds on printed official letter-forms in K. the word مورّخه taking the place of the P. expression بتاریخ "on the date of......"—

***tarjumān*** (ترجمان) T.? = P. مترجم interpreter, translator.—The K. form of the A. word is probably adopted from T., where it is the only word used in that sense (unless it is H.?). The P. equivalent is also, though much more seldom used in K., but then with the intercalation of an unnecessary vowel: v.s.v supra. The A. root itself of the word, although decidedly Semitic, is probably a loan-word in A. (as seemingly also in Hebrew) and might prove to be of Aramaic extraction.—

***tarkārī*** (ترکاری) = P. سبزجات - صیفی vegetables.—Obviously from تر "moist; fresh" and کاشتن "to sow".—

***tarmayda*** (ترمیده) H. = P. آرد flour.—Syn. *mayda*, q.v.

***taslīm kardan*** (تسلیم کردن) = P. شناختن to recognize: AA. چون استقلال افغانستان را تمامی دول متمدنه تسلیم کرده اند "since all the civilized countries have recognized the independence of Afghanistan......".—

***taslīm šudan*** (تسلیم شدن) = P (1) مسلّم شدن - ظاهر شدن - واضح شدن to become clear, evident, obvious; (2) وصول نمودن - گرفتن to receive (a letter, a sum of money, etc.) v. Introduction, pp. 32-33.

***tašarruf*** (تشرّف) T.? = P. سرفرازی having the honour (to attend a function, to pay a call, etc.)—

***tawānistan*** v. *tānistan*

***tawba*** (توبه) H. = P. داد و بیداد alas! --An exclamation used on occasions when a European would swear.—

***tayār*** (تیار - طیار) H. = P. حاضر ready.—Occurs once in ʻAbdul-Karīm's text: p. 81 l. 11, and twice in Md. Amīn: T 339 l 33 (note) and 363 l. 7.—cf. Morg Front. 296a, Morg Shugh 72.—

***taygar*** (تیگر) E. = P. ......bulldog.—Obviously the E. "Tiger".—

***taylafūn*** (OL. تلفون) = P. تلفون (*tilifūn*) F. telephone.—

***tayxāna*** (ته خانه) = P. زیرزمین cellar; basement-room.—

***tazkār*** (AA. تذکار) = P. یاد آوری reminder; remembrance.—

*tā al-hāl* ( AA. تا الحال ) = P. تا حالا - تابحال - تا حالا until now.—

*tā anūz* ( تا هنوز ) = P. تا حالا - تابحال - تا حال until now.—Syn. of the preceding.—

*tāifawī* ( AA طايفوى ) = P. طائفئى ( *tā'ifēyī* ) tribal.—

*tāk* ( تاك ) = P. درخت انگور vine.—cf. Morg Front. 293b.

*tālibu-l-ilm* ( طالب العلم ) = P. طلبه - شاگرد مدرسه school-boy; student —Syn. *muhassil*, q.v.

*tānistan, tawānistan* ( توانستن ) For its uses, v. Introduction, pp. 33–34.

*tāqī, tāqīn* ( طاقين - طاقي ) = P. عرقچين scull-cap.—Steingass gives it as Persian, but I have neither seen it in literature, nor heard in P. speech.—cf. Lor Phon. 181a; 196a; also Morg Shugh. 70 "*tā'kē* 'cap'".—

*tār* ( تار ) = P. (1) نخ sewing thread; (2) سيم تلگراف [telegraph-] wire: *tār zadan* =P. تلگراف كردن "to wire" (probably, a translation fr. E) —The word is good Persian, but is used in P. only for: (1) "warp"; (2) "string" (of a musical instrument); (3) (metonymic) name of a kind of stringed musical instrument, (4) "cobweb". And it cannot be used in P to designate either "thread" or "wire".—cf. Morg Front. 294b; 410b —

*tēγ* ( تيغ ) =P. نيغ ( *tīγ* ) point (of any sharp instrument); sword.—

*tēl* ( تيل ) H. =P. روغن oil: *tēl-i bādām* ( تيل بادام ) almond-oil; *tēl-i xāk* ( تيل خاك ) =P. نفط kerosene-oil.—Fr. Skr. *tailam*.—

*tēr kardan* ( تير كردن ) =P. عبور دادن to [make] pass.—

*tēr šudan* ( تير شدن ) =P. عبور كردن to pass.—cf. Morg Front. 410b; Morg Texts 309.—

*tēz* ( تيز ) =P. (1) تيز (*tīz*) sharp.—cf Morg Front. 296a; Morg Shugh. 72; (2) زود - تند swift, quick.—cf. Lor Phon. 181a, 196a.—

*tēzī* ( تيزى ) =P. تندى - زودى - سرعت quickness: speed.—

*tilgirām* v. *tilgirām*

*tiqir* ( تقر ) T.? =P. [ گل دار ] پوست برّهٔ تودلى skin of a dead-born lamb (with curls).—cf. supra *lisak*.—

*tīkā, kīkā* ( كيكا - تيكا ) =P. آهسته - يواش slow, slowly. Prob. fr. Psht. تيكاو *tikāo* "rest, stay, staying, tarrying", etc. v. Raverty, s.v.

***tikis, tikit*** ( تکس - تکت ) E. =P. (1) تمبر F. [postage-] stamp; (2) بلیط R. ticket.—

***tilgirām, tilgirām*** ( تلگرام - تلگرام ) =P. تلگراف ( *tilgirāf* ) telegram; wire: cable.—The form with the long *-ī-* seems to be the officially recognised, as we find it in the headings of the printed telegram-forms.—

***tit kardan*** ( تت کردن ) =P. بر زمین انداختن - ریختن to scatter; to throw down.—Prob. fr Psht. تیت *tit* "crooked, bent, curved, bowed" or تیتول "verb trans to bend, to curve" etc. (Raverty, s v) Lor Phon. 157.—cf. also Lor Phon. 196b: "*tit*; *tit* k., to put down", etc., Morg Front. 295b.: "*tit*, distributing, *tit kan*—to distribute, throw about".—

***tufang-i māšīndār*** ( MA. تفنگ ماسیندار ) =P. طوپ شصت تیر machine-gun.—

***tulabā*** ( طلبا ) =P. طلاب ( *tullāb* ) students.—An example of an arbitrarily formed A. broken plural it is obviously meant to serve as a plur. for the sing. [ طالب | العلم (v. supra), but is in reality a plur. form of the adj. طلیب, which does not mean (in spite of Steingass s.v.) "student" either in P. or K. (Steingass, besides. gives himself for طلبا the only meaning "inquisitors").—In P., however, the sing. طالب is not used at all, its place being taken by one of its plur.-forms—طلبه, which serves as sing, whilst the second plur.-form of the word—طلاب is used in its plural-meaning.

***türkiya*** ( ترکیه ) =P. عثمانی Turkey.—

***tül*** ( طول ) E. =P. طور (*tür*) F. muslin.— E. 'twill".— F. "tulle".—

***tülimišr*** ( تولمشر ) =P. سلطان captain (in the army).—The first link of the compound seems to come fr. Psht. تولی *tolacy* "a company", etc. (v Raverty, s v.), for the second part of the word v supra under *bulūkmišr*.—

***tül kardan*** ( تول کردن ) =P. قپان زدن - وزن کردن - کشیدن to weigh.—fr. H. cf Skr. *tulāyami*; H. "*tola*". cf. Morg Front. 293b.

***tūla*** ( توله ) ? =P. سوت whistle.—Syn. *išpilāq*.

***türkiya*** v. *turkiya*.

***tūta*** ( توته ) =P. تکه - خرده - ریزه piece, bit; chip; small.—Prob.

fr. Psht. توله *tōla* or تونکئی *tūtankaey* "a shaving. a chip, a clip, a filing, a fragment" (Raverty) —

*tūtā* ( طوطا ) H. = P. طوطی (*tūṭī*) parrot.—

*tūy* ( توی ) T. = P. عروسی marriage; marriage-feast. wedding — I find it only once in 'AbdulKarīm's text. p. 83 l. 22.—cf. also MorgFront. 296a "*tū'yāna*. 'price paid for the bride' " —

## U

*uγūr* ( اغور ) T. ? = P. هاون - هاونگ mortar. cf. MorgFront. 232a who takes the word to be Persian. I do not know the word, and was unable to trace it.—

*ŭkum* ( حکم ) = P. حکم ( *hukm* ) orders·—*ukum nīst* = P. قدغن است "it is not allowed" (lit. "it is not ordered" or "it is against orders").

*umayd* ( امید ) = P امید (*umīd-ummīd*) hope: *umayd mĕkunum* = P. امید دارم or (more often) امیدوارم "I hope".— Note the unsound construction of an abstract noun expressing a state with an active verb —

*urūp* (AA. اروپ ) E = P. اوروپا (*ūrūpā*) R. Europe.—

*urūsī* ( اروسی ) = P. پنجره window.—cf. MorgFront. 388a, who gives it in the form *ur'sī* and classes it as Persian.— Syn. *kilkīn*, q.v

*ūnā* ( sic: AA. اونا ) = P. آنها they —v. Introduction, p. 22.

*ūšān* (AA., OL. اوشان ) = P. ایشان they.—The word occurs in that form not only in current speech (always), but also in writing and print (along, however. with the standard form).—

## W

*wafd* ( وفد ) T ? = P. هیئت mission; corporation.—

*wáqit, waqt* ( وقت ) = P. زود early: *ma waqt āmadum* (here the word loses its superfluous "euphonic" vowel before the vowel in the next word, which facilitates the pronunciation) "I came early";—*sabāh wáqit xāhid raftan*? (here the additional vowel is preserved before a word beginning with a consonant) "will you go early in the morning?" or "will you go early to-morrow?"—Note the use of a noun in the sense of an adverb (or adjective), cf. for it *qīmat* s.v.—

*waqtan ki* ( AA. وقتاً که ) = P. در وقتیکه - وقتیکه at the time when.—

***waqtan-waqtan*** (AA. وقتا، وقتا) =P. گاهی ونهی from time to time —

***warxatā šudan*** ( ورخطا شدن ) =P. ترسیدن to get frightened.—

***wādār dāštan*** ( وادار داشتن ) =P. مجبور کردن to compel.—

***wār*** ( وار ) =P. ذرع yard.—cf. my "Afghan Weights and Measures" JASB. XXIV, 1928 No 4 421 note 1.—

***wārnis, wārniš*** ( وارنش - وارنس ) E. =P. روغن varnish.—

***wāzkit*** ( وازکت ) E. =P. جلزکه R. waistcoat.—cf. LorPhon. 185b; MorgFront. 297b; 412a. who both record the word with an -*s*- Yet the -*z*- is clearly heard in K where the word is probably connected in popular etymology with *wāz* < *bāz* "open" and *kit* < *kot* "coat".—

***wuqūāt*** ( وقوعات ) =P. وقایع events. AA. وقوعات داخلیه (*wuqūāt-i dāxiliyya*) =P. وقایع داخله (*vaqāyi'-i dāxila*) "home events".—

## X

***xafa*** ( خفه ) =P. رنجیده خاطر - دلگیر - عمگین - ملول sorry, displeased, disappointed; sad; angry.—cf MorgFront 299a; 412b; MorgTexts 311 ll. 5, 6, 7, etc.—In P. the word means "strangled, suffocated".—

***xafak*** ( خفک ) =P. ..... polecat.—

***xalās*** ( خلاص ) =P. (1) تمام finished; out of stock; (2) خاموش gone out (fire): *jaw xalās šuda* "the barley is finished.—out of stock", *ataš xalās šuda* "the fire is gone out" —

In P خلاص شدن means only "to free oneself", "to get rid (of something)" The word does not occur in 'Abdul-Karim's text in the sense attributed to it in K.—Nor has Platts got it in that sense.—cf. Morg Front. 299a; 412b; MorgShugh. 76.—

***xalīfa*** ( خلیفه ) H. =P. استا - استاد master (when addressing an artisan).—Syn. *mistri*, q v —The word is used in P. only with reference to a "Christian priest" (besides its ordinary meaning of "caliph").—

***xalta*** ( خریطه ) =P کیسه - همیان bag; leatherbag (for money); purse; wallet.—Used, though seldom, in P, but then with the correct pronunciation as *xarīṭé*.—

***xamandūk*** ( خمندوک ) ? =P. حبردوک (*xabazdūk*) ? (Horn, p. 6) beetle; scolopendra, centipede, wood-louse (for which latter the words سوسک and خر خاکی are mostly used in P.)

***xarkār*** ( خرکار ) =P. خرکچی a donkey-man; a donkey-driver.—

*xarwālā* ( خروالا ) H. =P. اولاغی one who rides on a donkey; donkey-man.—The suff. *-wālā* is borrowed from H. ("*-walla*"). The difference between this word and the preceding is that *xarkār* denotes a professional donkey-driver, whereas *xarwālā*, a man occasionally connected with a donkey (for instance, seen riding on one etc.).—

*xasta-xāna* ( خسته خانه ) =P. مریض خانه hospital.—Syn. *šifā-xāna*, q.v.

*xat* ( خط ) =P. کاغذ letter: cf. Morg Front. 413a. In P. the word means "[calligraphical] handwriting", also "a line".—Syn. *kāz*, q.v.—

*xākistardānī* ( خاکستردانی ) =P. زیر سیگاری ash-pan.—

*xāhān* ( خواهان ) = P طالب desirous: AA. که همهٔ شان خواهان تعلیمات عالی هستند "who all of them are yearning for higher education" —In P. the word is used in the meaning of "[well-] wisher" or "[well-] wishing" only.—

*xāna* ( خانه ) =P. اطاق - اوطاق room.—

The word means in P. only "house". The P. equivalent of the word is, however, sometimes encountered in K. newspaper-articles, probably in such as are integrally reprinted from P. newspapers: AA یکٔ اوطاق تجارتی "a chamber of commerce" —

I find the word in 'Abdul-Karīm's text only once: p. 38 l. 21 in the sentence already quoted supra s.v. *mā-bayn*, q.v LorPhon 178b. and 193b. records, however, the word with the meanings "house" and "house. home".—So also MorgFront. 299b.

*xāna-i nānxurī* ( خانهٔ نانخوری ) =P. سفرهخانه اطاق dining-room.—Syn. *xāna-i taām*. q.v.

*xāna-i šištan* ( خانهٔ ششتن ) =P. صالون F. - اطاق پذیرائی اطاق مهمان sitting-room; drawing-room; reception-room —Probably a mere translation from E.

*xāna-i taām* ( خانه طعام ) =P. سفره خانه اطاق dining-room. Syn. *xāna-i nānxurī*.

*xāna-i xāw* ( خانه خواب ) =P. خوابگاه اطاق bedroom.—There is no real division of rooms according to their uses either in Persia or in Afghanistan, except into the "outer" (*bīrūn*) and "inner" (*andarūn*) parts of the house: one eats in whichever room one likes, and one sleeps where one has eaten in an average house in these two countries. This

expression, as also the three preceding expressions, are therefore neologisms which have arisen to meet the requirements of the new ideas imported in the two countries by foreigners—in Persia somewhat earlier, in Afghanistan quite recently. It is interesting to compare with each other the forms assumed by these neologisms in the two countries expressing so differently the same ideas, in practically the same language.—

*xārpišang* ( خار پشنگ ) = P. خوجه تیغ hedgehog. Obviously for *xār-pišak* "thorny cat". cf. for the -*n*- I v Kurd. 231 "*pišing*, cat" (already quoted supra s v. *pišak*. q.v ), which is the only other instance known to me of that word being pronounced or spelt with an -*n*- in the final syllable.—

*xāš* ( خاش ) ? = P. دم tail.—

*xāw* ( خواب ) = P. خواب (*xāb*) sleep; dream.—

*xēl* ( خیل ) Psht. = P. ایل tribe; clan.—

The A. collective noun means originally "horses; horsemen, cavalry." In Psht the word has been adopted to denote the different Afghan tribes, and is used in K. chiefly as the second part of a compound, the first link of which is the name of a tribe, *e.g.*, *Sulaymān-xē* ( سلیمان خیل ). The K. pronunciation of the word, with a *yā-yi majhūl* instead of the A. diphthong, must be very old, cf. for it Horn, p 33, Geiger, p 314; cf. also my translation of Noeldeke's "Iranian National Epic", Journal of the K.R. Cama Oriental Institute, No 6, 1925, p 157 note 1 —

*xidmatgar* ( خدمتگر ) H. = P. پیشخدمت servant valet —The word خدمتگار (with a long -*ā*-) means in P "a maid-servant; a maid", and cannot be applied to a male domestic.—

*xīstan* ( خیستن ) = P. بر خاستن to get up: *ma az xāw xīstum* "I awoke" (lit "I got up from sleep).—cf I v Birj. 270 note 5; Morg Front. 301a.

*xuār* ( خوار ) = P. خواهر (*xāhar*) sister.—cf. LorPhon. 178b; 194a; also MorgFront. 413a; Morg Texts 309 note 2.—

*xud*, *xu* ( خود ) = P. (1) خود self; same; (2) کی all the same; but: *tu xu jūr astī* ? = P. حالا تان که خوبست "but your health is all right?"—In K. speech the word (or particle) occurs continually without any particular meaning being attributed to it except stressing the sense of the phrase in

which it occurs. A reverse, *i.e.* a moderative effect is obtained in K. by using the adverbial expression *gūyā* "I daresay", which is also extremely current and repeated by some individuals almost after every word they pronounce.—cf. Iv Birj. 269 No. 7 l. 8; 304 No 126; 305 No. 129.—cf. also Morg Front. 298b.—

*xudhā* ( خودها ) =P. خود شان themselves.—In P. this pronoun has no plural form —

*xunuk* ( خنک ) =P. سرما ـ سرد cold —In P. the word means "cool, fresh", and is applied to coolness of a pleasant character (in summer). In K. *xunuk* is used indiscriminately to denote any kind (and degree) of cold, more especially a rigorous cold of an unpleasant character (in winter).

I find one instance of the word *xunuk* being used as in K. in Abdul-Karīm's text p. 89 l 1/2; زمستان دسار خنک "a very cold winter"—cf. Lor Phon. 178b; 194a; Morg Front. 299b; Morg Texts, 325 l. 4 —

*xurāka* ( خوراکه ) =P. (1) عليق fodder; (2) خوراك food: AA. نگهداشت حيوانات و خوراکه آن "the keeping of cattle and their fodder".—

*xurd* ( خرد ـ خورد sic ) =P. کوچک little. small. *bačča-i xurd* =P. طفل کوچک "a small child".—In P. خرد (opp. درشت "coarse, big") means "minute, fine", as applied generically to homogeneous substances (like grain, flour, sand) or vegetables of one kind (like potatoes, apples etc.) or any other uniform commodities (like charcoal, etc.), but never individually. The word کوچک seems to be unknown in K. Anyhow, I have never heard it used in speech, nor seen it in writing —'Abdul-Karīm's text contains it once, p. 91 l 9: شش نفر از خرد و کلان. Md. Amīn uses, however, the P. word, T. 341 l. 37: کوچک حيوان.—cf. Lor Phon. 194a.—

Y

*yakum* ( يکم ) =P. اوّل the first: شمارهٔ يکم "No 1" ("Anīs").

*yala kardan* ( يله کردن ) =P. ول کردن to let go; to let loose; to leave alone.—cf. Iv Birj. 270 No. 9 l. 2 "*yallà bu*"; cf. Lor Phon. 195b "*yalā*, open"; also Morg Front 301 "*ya'lī* 'let loose, free'". MorgTexts 313 l. 10 "*īlá' kat*"; p. 319 l. 11/12 "*ēlâ kat*". The final *-a* in this word sounds, in fact, very much like a long *ā*, but it is not. cf. also Steingass, s.v.—

*yax* ( یخ ) = P. سرد cold.—
The word means in P. only "ice, iced", but might sometimes impart the idea of "freezing": یخ بستن "to freeze" (of a river, a pond, etc.), یخ کردن "to freeze" (of hands, etc.).—It is also, naturally, used in K. in its standard meaning of ice: cf. Lor Phon. 195b.—Morg Front. 413b. Morg Shugh. 78. Morg Texts 325 l. 11 translates correctly "the frost has struck us". —

*yaxan* ( یخن ) = P. یقه ـ یقه collar v. Introduction, pp 11–12.

*yilām* v. *lilām.*

Z

*zambēl, zambil* ( زنبیل - زبیل ) = P. تخت روان palanquin.—Corr. of زن بر *zan-bar*, lit "woman-carrier".—

*zamīn-larza* ( زمین لرزہ ) = P. زلزله earthquake.—Morg Front. 302 records the P equivalent for Parachi, but Morg Shugh. 78 has got a most interesting parallel compound "*zamīnǰumb*" —

*zanāšūyi* ( زناشوئی ) = P. ازدواج matrimony, wedlock —

*zanjabil* ( زنجبیل ) = P. زنجبیل ginger. —Syn *adrak* q v.—

*zan-talāq* ( زن طلاق ) = P. قرمساق a [voluntary] cuckold —A term of gross abuse not known in P.—

*zardak* ( زردک ) = P. هویج carrot.—cf Psht. زردکه *zardaka'h* (v. Raverty, s v.); also Steingass s.v. The word in Psht is probably borrowed fr. K.—
BrDial. 794 gives the word as Persian in explanation of the dialect. زرگ, but it is not clear, whether the gloss is his own or quoted by him from the Ms he is dealing with cf. Iv Birj. 343, who explains it. however. as "a sort of beet-root"; but cf. Morg Front. 303a.—

*zarūrī* ( ضروری ) = P. (1) لازم necessary: (2) فوری urgent: *barā-i mān zarūrī as* ' it is necessary for us", *ī xat zarūrī as* "this letter is urgent" - -In P. that word, if ever used, could be only understood as a noun: "lavatory, latrines".

*zābit* ( ضابط ) T. = P. سرباز soldier —Obviously of recent importation from Turkey.—Syns. *askar, laškar, sipāh*, q.v.

*zād kardan* / *zāt kardan* ( زاد کردن ) = P. زائیدن to give birth.—Another instance of the splitting of verbs, so current in K., v. Introduction, pp. 28-29. Lor Phon 187b and 203a has, however, got "*zoi.id-zoi(y)*—, to give birth to".—

*zānūxam* ( زانو خم ) =P. زانوی (*zānūyī*) knee (of a water-pipe).—

*zār* ( زهر ) =P. زهر (*zahr*) poison.

*zāt kardan* v. *zād kardan*.

*zirāat-i lalimī* ( زراعت للمی ) =P زراعت دیمی, natural agriculture (i.e. without artificial water-supply) —From Psht.: cf. Raverty s.v., also Morg Voc. 36 "*lalmī* growing naturally, 'not irrigated'", etc.

*zīna* ( زینه ) =P. (1) نردبان pop. نوردان ladder; (2) پلّکان - پلّه staircase.— Bartholomae (Zur Kenntniss d. mitteliranischen Mundarten, I, Sitzb HAW., 1916 pp. 45–47) discusses at length the Pahl. word *ūzēnak*, for which he gives the reading *u-ēnak* and two meanings (1) exit ("Ausgang") and (2) ascent or ascension ("Aufgang") and derives from it (1) هزینه "expenditure", and (2) زینه, "ladder" or "staircase". He is, however, not aware of the existence of such a word in colloquial Tājīkī and thinks it to be a mere "dictionary word", without any example ('ohne Beleg') in literature".—He further expresses the opinion that the H. زینه is un-Indian, and must be the same word borrowed from Persian (ibid. p 47) —

Md. Amin has not got the word, and uses instead of it its P equivalent: T 365 l. 12.—

cf. also Iv Birj. 343, who explains it, however, as "the lowest step of the staircase".—

*zīna-i ēstāda* (lit. "standing staircase") is also used in the meaning of "staircase", as opposed to "ladder".—cf. Lor Phon. 187b; cf. also Morg Front. 303a.

*zulfī* ( زلفي ) H. =P. زنجیر در - حلقهٔ در door-chain; ring (of a door).—cf. H. "a door-chain to keep the door from being lifted from its place (sic !); chain-hinges" (Fallon, s v.)

*zūf* ( ضعف ) =P. ضعف (*za'f*) weakness.—Both vocalisations are, of course, admissible in A., without affecting the meaning of the word, but the one used in P. seems to be foreign to K., which, in its turn, is entirely unknown in Persia.—

Ž

*žāl* ( ژال ) =P. تگرگ hail.—In P. the word (more usually in its fuller form ژاله ) means "hoar-frost".—cf. Iv Birj. 340 "*julaw, jola, zhola* (LP. *zhāla*), hail stone"; also Lor Phon. 179b. "*jåla*, hail". 187b. "*žåla* (?), v. *jåla*", and 195b "*jōla*, hail"; Morg Front. 262a has got "*jåla, žāla*", and 397a "*jå'lī*".—

# Animadversiones Indicae.

By GIUSEPPE TUCCI.

CONTENTS



## I

## ON MAITREYA, THE YOGĀCĀRA DOCTOR

Professor Ui[1] has in a series of studies pointed out that no doubt is possible concerning the historical existence of Maitreya who was the master of Asanga and was himself the author of many works. He supported his view by references to the Chinese translations of some Buddhist texts. It will not be useless to quote here some new sources, which quite agree with his opinion.

(I) The commentary of Sthiramati upon the Madhyānta-vibhāga [2]

The manuscript of this text has been found, though in a very damaged condition, in Nepal and is being edited, with a complete restoration into Sanskrit from the Tibetan of all the missing passages, by me and my friend Vidhuśekhara Bhaṭṭā-cārya. The author begins by commenting upon the introductory stanza of the *vṛtti* of Vasubandhu on the kārikās of Maitreya, which runs thus in Chinese:

---

[1] *Studies in Indian Philosophy* (in Japanese) I p 359 ff. *On the author of the Mahāyāna-sūtrālaṅkāra* (Zeitschrift fur Indologie und Iranistik. VI. 2, 215). *Maitreya as an historical personage* (Indian studies in honor of Charles Rockwell Lanman, p 95 ff).

[2] This is the actual reading of the MSS , but in the Tibetan translation we have: *vibhaṅga*. Special thanks of the author of these notes and of Buddhist scholars as well must be expressed to His Holiness Śrī Hemarāja Sarmā, *guru* of His Highness the Mahārāja of Nepal, for having succeeded in getting the MS. of this work and having allowed me to make a copy of it.

恭 敬 善 行 子　能 造 此 正 論
爲 我 等 宣 說　今 當 顯 此 義

and thus in Tibetan :—

བསྟན་བཅོས་འདི་ནི་རབ་མཛད་པ།
བདེ་གཤེགས་ཉིད་སྐྱེས་བདག་སོགས་ལ།།
འཆད་པ་ལ་ཡང་མངོན་མཆོད་ནས།
དོན་རྣམས་དབྱེ་ཕྱིར་འབད་པར་བྱ།།

It can be restored with the help of the quotations scattered throughout the commentary of Sthiramati in the following way :

[*tacch s'āstrasyāsya pranetāram abhyarhya sugatātmajam vaktāram cāsmadādibhyo yatisye 'rthavivecane*].

Here Sthiramati makes the following remarks :

*asya kārikāśāstrasyā'rya maitreyah pranetā . . . . . . . . vaktāram iti ; . . . . . sa punar āryāsanga ; tatrāryamai treyādhisthānād dharme[na paramparayā śāstram idam prādurbhūtam ucyate]*

(II) Then Haribhadra, in his big Abhisamayālaṅkāraloka, which is at the same time the commentary upon the Asta-sāhasrikā-prajñapāramitā and the Abhisamayalankara-kārikā of Maitreya, confirms that the tradition was always current in India that Maitreya was a historical personage and writer of many treatises; we read in fact on page 73 of my edition:[1]

"*Vidita-samasta-pravacanā'rtho labdhā'dhigamo'py āryāsaṅgah punarukta-bāhulyenā' punaruktapradeśe'pi pratyeka-pada-vyavacchedā-darśanena gāmbhīryāc ca prajñāpāramitārtham unnetum aśakto daurmanasyam anuprāptas tam uddiśya Maitreyena Bhagavatā prajñāpāramitā-sūtram vyākhyātam abhisamayālaṅkārakārikāśāstram ca krtam*"

The same thing is stated in the introductory verses of the same work, where we read :

*Maitreyena dāyāvatā Bhagavatā netum svayam sarvathā prajñāpāramitānaye sphutatarā tīkā krtā kārikā*

---

[1] Published in Gaekwad's Oriental Series The first volume containing the text will be out, I hope, shortly; then, a second volume will follow in which the life of Haribhadra, his works and the contents of the Abhisamaya will be discussed in detail and compared with the mystic theories of other schools. The historicity of Maitreya is supported by Tib. tradition.

In this connection, it will not be out of place to refer once more to the well-known passage of Subandhu's Vāsavadattā on the meaning of which many theories have been advanced.

"*Nyāyatattvam iva Uddyotakarasvarūpaṃ bauddhasaṅgītim tvālaṅkārabhusitām.*" [1] The relation expressed here is not between two different works such as Mahāyānasūtrālaṅkāra and Mahāyānābhidharmasaṅgīti of Asaṅga (theory of Prof. Sylvain Levi) [2] nor between the Buddhist canonical books in general and some kind of explanatory literature (theory of Prof. Lüders) [3] In the first part we have quite a clear relation expressed between the Nyāyasūtras and a particular commentary upon it, *viz.*, that of Uddyotakara; we must therefore logically infer that in the second case also allusion is made to some particular texts, one being the *mūlasūtra* and the other a commentary. Now, we know that although *saṅgīti* is any sūtra beginning with the introductory formula: "*evam mayā śrutam* ("*Evam mayā śrutam iti kṛtvā bhikṣavo,mama dharmaḥ saṅgītavyaḥ.*) still no other *sūtra* had, during the great blossoming of Mahāyāna, such a great diffusion and notoriety as the Prajñāpāramitā in its various redactions. Maitreya was the first to write a commentary upon it called the *Pañcaviṃśatisāhasrikāprajñāpāramitopadeśābhisamayālaṅkāraśāstra*, which, together with the kārikas of the Mahāyānasūtralaṅkāra written also by him and commented upon by Asaṅga, gives us a fairly good idea of what an *alaṅkāra* (*bauddhaśāstra* according to the commentator Narasiṃha) must have been, *viz.*, a metrical commentary, the purpose of which was to classify, to discriminate and to harmonise the various doctrines expounded in the Mahāyānasūtras and to establish, at the same time, the foundations of the new dogmatics.[4] And the Abhisamayalaṅkāra enjoyed a notoriety as other texts can hardly claim. It was commented upon by Asanga, Vasubandhu, Bhadanta Vimuktisena, Āryavimuktisena,[5] Haribhadra and it represents the foundation of the mystical theories and practices of the Yogācāras as well as of the Buddhist Tantrics of India and Tibet. Just as Subandhu refers to such a notorious work as Uddyotakara's vārttika, we should expect that in the second instance also, as I pointed out before, he alluded to some other

---

[1] P. 235 (Bibl. Indica ed.).

[2] Introduction to the translation of Asanga's *Sūtrālaṅkāra* p. 16.

[3] *Bruchstucke der Kalpanāmaṇḍitikā des Kumāralāta* p 28-29

[4] The more I study the works of Maitreya the greater it seems to me to have been his work. It was in fact a very difficult task to combine the often, at least apparently, contradictory statements of the *Sūtras*, and also to give a consequential and logical order of the topics discussed in them, with so many repetitions, and such a great redundancy Still this was necessary, when the mahāyāna masters wanted to support their views with the authority of the *āgamas*. The position of Maitreya is discussed by me in the introductory volume of the *Abhisamaya*.

[5] A manuscript of his work has been brought by me from Nepal and is being edited.

well-known work; the Abhisamaya quite well fulfils this condition, chiefly when we consider that the comparison implies necessarily a philosophical work even in the second case. Nor will it be out of place to remember that the association of Uddyotakara with the Bauddhaśāstra is not absolutely arbitrary. Uddyotakara wrote his work in order to refute Diṅnāga and his teachings and Diṅnāga, besides writing his treatises on nyāya, composed also a metrical commentary on the Aṣṭasāhasrikā-prajñāpāramitā following the model of the Abhisamaya.[1]

## II

### The First Mention of Tantric Schools

Very little attention has been paid up till now to Tantric literature; and yet, apart from some exceptions, the Tantras contain almost nothing which can justify the sweeping judgment of some scholars who maintain that they represent the most degenerated form of Indian speculation. On the other hand, after a careful study, I cannot help seeing in them one of the highest expressions of Indian mysticism which may appear to us rather strange in its outward form, chiefly because we do not always understand the symbolical language in which they are written. Moreover, they are an unparalleled source of information to the ethnologist as well as to the historian, and when properly studied they will shed a great light upon some ignored aspects of Hindu civilization and upon the manifold elements of which this is the outcome. The rule once prevalent among the Tantric, *viz.*, "*kulapustakāni gopāyet*" has no value to-day and a good deal of Tantric literature is accessible to scholars, which, however represent but a small part of the enormous material still awaiting publication. Its investigation is an urgent task of oriental scholarship. But not only I disagree from many of my western colleagues, so far as the general appreciation of the Tantras is concerned, but also as regards other points, and chiefly the antiquity of Tantric literature. The opinion generally accepted is that they originated about the VII century A.D.[2] The first objection to this theory is that many buddhist texts which were considered as sūtra's and are now incorporated into the Sannipāta or Mahāsannipāta class of the Chinese Canon, contain many an element which is characteristically tantric, such as *mantras*, their symbolic value, the acceptance of Hindu gods and goddesses, the necessity of *abhi-*

---

[1] This work is preserved in Chinese as well as in Tibetan and quotations from it are to be found in Abhisamayālaṅkarāloka, Dharmasamgraha, etc.

[2] Winternitz, *Geschichte der indischen Literatur.* I Band. p. 482, Kern, *Der Buddhismus*, II. p. 525 f. But see the sound remarks by Przyluski in BEFEO, XXIII. p. 317

*seka*, etc. But many of these texts which, though they cannot be considered as real tantras, show the influence of tantric ideas and rituals, were translated into Chinese before the seventh century A.D.[1] I quote as a characteristic example the *Suvarnaprabhāsasūtra* which is quite tantric in its contents, formulae, and rites and which was first translated by *Dharmakṣema (first half of the fifth century, A.D.) or the *Mahāmāyūrīvidyārajñī*, absolutely tantric, already translated by Kumārajīva.[2] But leaving aside this question which cannot be fully studied within the limits of a brief note, I wish to point out some old passages which seem to testify to the existence of Tantric schools at any early date. In *Tattvasiddhiśāstra* by Harivarman (IV cent. A.D.) and in the *Madhyāntānugamaśāstra* by Asaṅga[3] there is an allusion to a school called 若耶須摩 na ya siu mo. No definite reference is to be found in that passage to the theories peculiar to the sect; but in Harivarman's work it is said that they admitted the existence of 16 *padārthas* and in *Madhyāntānugamaśāstra* they are quoted after the Maheśvara school and in connection with logical theories concerning the validity of a *hetu*. This fact led Prof. Ui to think that these na ya siu mo might have some connection with the *nyāya*, the relation of which with the *Īśvaravāda* (*śiva*) can be traced to an early date.[4] But Ki-tsang commenting upon the Śataśāstra of Āryadeva identifies them with the Jñātiputras, Ñātaputtas, who are generally considered as a school of the Nirgranthas, viz., the Jainas, and in accordance with Harivarman, attributes sixteen topics to them. These topics as I have shown elsewhere, are the following: (*a*) eight derived from "hearing-knowledge" 聞慧生 *śrutajñāna*, viz., (1) astronomy and geography, (2) arithmetics, (3) medicine, (4) *mantras*, (5-8) four vedas; (*b*) eight derived from a "cultivation-mind" 修慧生 (*bhāvanā* ?) (1-6) cultivation of the six divine practices, (7) cultivation of the worship of the stars, planets, gods, (8) cultivation of the practice of the ṛṣis. We cannot say how far the information

---

[1] The evolution of the text of the Āryamañjuśrīmūla-tantra, well illustrated by Prof. Przyluski, art. cit., is highly instructive. Even if many tantras were originally considered as sūtras and many among them always retained the form of a *Saṅgīti*, there is no doubt that, so far as their contents are concerned, they must be ranged among the Tantras.

[2] For this work, various redactions of which are known, see S. Lévi, *JA.*, 1915, p. 19.

[3] Both the works are lost in Sanskrit, but their translation is to be found in the Chinese Canon.

[4] The passages have been already referred to by me in: *Pre-Diṅnāga Buddhist Texts on logic from Chinese sources*, Introduction.

of Ki-tsang is right, but the fact remains that these *padārthas* have nothing in common with the Jainas, nor do they show any relation with the sixteen *padārthas* of the Nyāyasūtras. On the other hand the reference to *mantras*, medicine, worship[1] of stars, planets, etc.. even if not necessarily suggesting some connection with the Tantras, points out, at least, some practices or doctrines which were not absent in them Even the allusion to the four Vedas does not exclude the possibility that we are here concerned with some reference to Tantric doctrines It is known, in fact, that though the Tantras were sometimes considered as being heterodox, *bāhya*, still the Tantrics themselves generally admitted the authority of the Vedas, four in number, (and often recognising the supremacy of the Atharvaveda over the others)[2] though assuming that in the *kaliyuga* the Tantras afford the easiest way to *mukti*.

But is there any positive ground to affirm that in the Nayasinmo-: **Nyāyasauma* **Nayasaumya* **Nayasauma*, we have undoubtedly a reference to Tantric schools ? Let us begin with the *Saumas* or *Saumyas*. Though we cannot gather very much from the *lexica*, still, reference to them can be found in Sanskrit literature and of such a kind as to support our view.

(a) Raghūttama in his *Bhāsyacandra* on *Nyāyabhāsya* quoted the Saumya as a *bāhya siddhānta* (Nyāyadarśana ed. by Gaṅgānātha Jhā, Chowkhamba Sanskrit Series p 30) *Cārvāka-sauma-saugata-jinā-'rhata-digambarāh sad bāhyāh siddhāntāh*

(b) *na vindanti padam śāntam kaulīnāṃ niskalam guruṃ* |
*samvādayanti ye kecit pāpam* [3] *Vaiśesikās tathā* ||
*bauddhās tv arihantā ye soma siddhāntavādinah* |
*mīmāmsāh pañcaśrotaś ca vāmasiddhāntadaksiṇāḥ* ||

This passage is taken from the Akulavīratantra revealed by Mīnanātha and preserved in a MS. in the Durbar Library of Katmandu. The passage was first communicated to me by Prof. Bagchi and, then, by His Holiness Hemarāja Śarmā (*guru* to His Highness the Mahārāja of Nepal) whose knowledge of the Tantric literature I had the privilege to admire during my stay in Nepal and who was so kind as to explain to me some difficult portions of the Tantrasāra of Abhinavagupta He also pointed out to me in a long letter from Katmandu dated 29. X. 29 the two commentaries on the Prabodhacandrodaya which are not accessible to me and are reproduced in the following item as written in his letter.

---

[1] Even the number 16, as is known, plays a great part in Tantric lore see my: *Tracce di culto lunare nell. India antica* Rivista di Stud Orientali; Roma, 1930.

[2] Cfr. *Rudrayāmala* p. 130, 130, 146. On the non-vedic character of Tantras, see Lakṣmīdhara's com on Saundaryalaharī, p. 81.

[3] This is the reading of His Holiness Śrī Hemarāja Śarmā; but Prof. Bagchi reads *nyāya*. On *Somasiddhānta* cp. GOPINATH RAO, *Hindu Iconography*, Vol. II, p I, pp. 20 and 24.

(c) *Prabodhacandrodoya.* Act. III

*eṣa purastāt Somasiddhāntaḥ...... |*
*(tataḥ praviśati kāpālikarūpadhārī somasidhāntaḥ)*
*narāsthimālākṛtacārubhūṣaṇaḥ śmaśānavāsī nṛkapālabhojanaḥ |*
*paśyāmi yogāñjanaśuddhacakṣuṣā jagan mitho bhinnam abhinnam īśvarāt || ....*
*mastiṣkāntravasābhipūritamahāmāṃsāhutīr juhvatām vahnau brahmakapālakalpitasurāpānena naḥ pāraṇā |*
*sadyaḥ kṛtakaṭhorakaṇṭhavigalatkīlāladhārojjvalair arcyo naḥ puruṣopahārabalibhir devo mahābhairavaḥ || ....*
*etat karālakaravālanikṛttakaṇṭhanāloccaladbahulaphenilabudbudaughaiḥ |*
*sārdham damaḍḍamaruḍāṅkṛtidhūtabhūtavargena bhargagṛhiṇīm rudhirair dhinomi || ....*
*idam pavitram amṛtam pīyatām bhavabheṣajam | paśupāśasamucchedakāraṇam bhairavoditam ||*

*Rucikaraṭīkā; sahomayā vartate Somaḥ tasya siddhānta Somasiddhāntaḥ. gaurīmahādevābhyām bhairavabhairavīmūrtibhyām vedamārgaparityāgāyāsurān pravartayitum ayam siddhāntaḥ kṛtaḥ. Karpūramañjarīgranthe Bhairavānanda etad upajīvako' py tadvimśatibhedabhinnaḥ tatraiva ḍākinīyakṣiṇīprabhṛtīnām antarbhāvaḥ.*

*Prakāśaṭīkā ; asmākam brahmarandhropalakṣitaḥ kapālo brahmakapālaḥ Tantra kalpitā vidyamānā surā cāndrī, tasyāḥ pānena pāraṇā vrataṣamāptiḥ. ata evāyam Umayā sahitaḥ somas tasya siddhāntaḥ*

*Candrikā ; Umayā sahitaḥ somo yathā Pārvatyā saha Kailāse modate, tadvad bhaktaḥ pārvatītulyakāntayā sahita īśvaraveṣadhārī san Kailāse sa iva modate.*

(d) Then in the Āgamapramāṇya by Yāmunācarya, the *guru* of Rāmānuja, we read the following passage which supports our view even more evidently than the others. (Reprint from "The Pandit" p. 26.)

*śaivam pāśupatam caiva bauddham apy ārhatam tathā |*
*kāpālam pañcarātram cety evam pāsaṇḍatā smṛteḥ ||*
*vaidikam tāntrikam ceti vibhāgakaraṇād api |*
*gamyate pañcarātrasya vedabāhyatvaniścayaḥ ||*
*śaivam pāśupatam saumyam lāguḍam ca caturvidham |*
*tantrabhedaḥ samuddiṣṭaḥ saṅkaram na samācaret ||*

There is, therefore, no doubt that the Somasiddhānta represented a Tantric sect, to be identified with the Kāpālikās, and that the existence of this school can be proved as early as the time of Harivarman and Asaṅga. It appears also from the commentaries upon Prabodhac, that they practised rites similar to those of the sahajiyā sect. They were in the beginning and remained all throughout a Śaiva sect, but traces of contamina-

tion with the Buddhist Siddhas can be found in the extant literature. In fact in the *Śābaratantra* we have a list of twenty-four Kāpālikās, 12 *gurus*, or rather 12 forms of Śiva as *guru*, and 12 *śiṣyas*; among these it is easy to recognize the names of well-known Siddhas as they appear in the Buddhist tradition; Nāgarjuna, Mīnanātha, Carpata This can easily be seen in the following table taken from the Śabaratantra[1].

LIST OF THE 24 KĀPĀLIKĀS

| | | | |
|---|---|---|---|
| 1 | ādinātha | 13 | nāgārjuna |
| 2 | anādi | 14 | jaḍabharata. |
| 3 | kāla | 15 | hariścandra |
| 4 | atikālaka. | 16 | satyanātha |
| 5 | karāla | 17 | mīnanātha |
| 6 | vikarāla | 18 | gorakṣa |
| 7 | mahākala. | 19 | carpaṭa |
| 8 | kālabhairavanātha | 20 | avadya |
| 9 | baṭuka | 21 | vairāgya |
| 10 | bhūtanatha | 22 | kanthadhārin |
| 11 | vīranātha | 23 | jalandhara |
| 12 | śrīkantha | 24 | malayārjuna |

As regards the other part of the term *na ya siu mo* which may go back to a form *nyāya*[2] or *naya* it is known that *naya* was the name of a very old section or group of Tantras I refer here to the Nayasūtra which is a section of the *Niśvāsatattvasaṃhitā*, an old manuscript of which, written in the transitional *gupta*-characters, is preserved in the Durbar Library of Nepal and has been described by Haraprasāda Śāstri in his Nepal Catalogue.[3]

## III

### ON THE NAMES MĪNANĀTHA AND MATSYENDRANĀTHA

It is known that one of the greatest Siddhas, viz., those mystics who tried to harmonise Mahāyāna Buddhism and Hinduism and are supposed to have been eighty-four in number, is said to have been Matsyendranātha. In the Tibetan Grub-t'ob as well as in the old Bengali Gorakṣavijaya some legends

[1] The Śābaratantra does not seem to be very old, but it is highly interesting for the study of Indian folklore since it contains formulae in Arabic and reference to a Mohamedan Siddha called Ismail Pir-Ismail *yogin*. Edition in Bengali characters in the monthly magazine Aruṇodaya. The same passage with better readings is quoted in Gorakṣasiddhāntasangraha p. 16-19, where the interesting information is given that the 24 kāpālikās were created by Nātha (Śiva) in order to combat the twenty-four avatāras of Viṣṇu, when Paraśurāma had killed the kṣatriyas.

[2] The two forms, *naya* and *nyāya*, as is known can be interchanged. So far as the Chinese transcription is concerned the character corresponds to ja, jā, jñā ñña nna ña na (in pracritisms from scr. *nya*). The Nayottara has recently been the object of a diligent study by Prof. Bagchi, IHQ, Vol. V, p. 754.

[3] Vol I. P. 138 ff.

are narrated for the explanation of this strange name;[1] but it seems natural to suppose that these traditions do not contain anything historical, but were rather invented on the basis of the name itself. In other words, it is the name which gave birth to the legend and not a particular event which was the origin of the name. Moreover, it is a surprising fact that Matsyendranātha and Mīnanātha are mere synonyms and, strange enough, in some lists one is said to have been the son of the other.[2] So it may be doubted whether in this case we are concerned with personal names or rather with a title or appellative of a special class of yogis In the Tantric schools there were special designations for certain stages reached by the initiated or for particular conditions of life that the adepts had chosen; so we have the *avadhūta* in the Śaiva sects, the *Vajrācārya* or the *Pūrṇaprajña* in the Buddhist schools; names like these are essentially initiation names showing a well-defined stage of holiness, though they may become—and in fact later on became—personal names. That this was the case with the name Matsyendranātha seems to be indicated by the fact that the Grubt'ob considers Matsyendra as another name for Lui-pā, the *ādisiddhācārya* of the Caryācaryaviniścaya, while in the lists of the Varṇanaratnakara and of the Haṭhayogapradīpikā no mention is to be found of Luipā though there is mention of Matsyendranātha. But better support to our view comes from the Kashmiri tradition where the name Macchinda,[3] that is the prākrit or apabhraṁśa form of scr. Matsyendra is clearly considered as an appellative of some siddhas who have reached a particular stage in the mystic realization We read, in fact, in the Tantrāloka of Abhinavagupta, Vol. I, p. 25.

---

[1] The legend referred to here is the same as that of Jonah. It is at present impossible to state whether we have here the trace of some influence exercised by Semitic traditions on our school, or a quite independent form of the legend, which, as I remember to have read in DUSSAUD *Civilizations Préhelleniques*, seems to have been known also to the Creteans. Cp. PISCHEL *Der Ursprung des christ. Fischsymbol* Sitzungsberichte d. Preuss. Akademie, 1905. LAUFER *Die Bruža Sprache*. p. 11. 12 (reprint). There is agreement between Gorakṣavijaya and Grub t'ob, life of Mīnapāda: but the legend, here related in connection with Luipāda, Macchindra, Matsyendra, is different. Cp. the German translation of the *Grub t'ob* by Grünwedel in Baessler Archiv. Moreover it should be noted that while Mīnanātha is said to have been a fisherman from Kāmarūpa, (*Grub t'ob* and *Bka 'ḇabs bdun ldan*. translated by Grünwedel in Bibliotheca Buddhica XVII). Luipā is said in the Grub t'ob to have been a prince; on Luhi cadra, Lohicandra or Lohidāsa cfr. VASU, *Modern Buddhism in Orissa*, p. 123, n. 2. Luī, Luijī is, perhaps, as already suggested by GRÜNWEDEL, an *aprabhraṁśa* form for *Rohita*; *rohita* as a fish of good omen is well known in Buddhist Literature; cp. *Avadānaśataka* I, 168 ff. *Jātaka* IV, p. 2, etc.

[2] *Bka 'ḇabs bdun ldan*. p. 121.

[3] So also Macchindra in the Maṅgalāṣṭaka attributed to *Kālidāsa* on which cp. Gokhale. *The Maṅgalāṣṭaka* of K., I.H.Q., I. p. 739.

*rāgāruṇam granthibilāvakīrnam*
*yo jālam ātānavitānavṛtti* |
*kalombhitam bāhyapathe cakāra*
*stān me sa macchandavibhuḥ prasannah* ||

Here the commentator Rājānaka Jayadratha first quotes the following verse —

*macchāh pāśāh samākhyātāś capalāś cittavṛttayas* |
*cheditās tu yadā tena macchandas tena kīrtitaḥ* ||

And then comments · "*pāśakhandanasvabhāvo macchanda eva.*" It is, therefore, evident that at the time of Abhinavagupta the name *matsyendra*, apabhraṃśa : *macchinda*, *macchanda* was a mere appellative for some Siddhas; the possibility that it was a personal name seems to be excluded by the artificial legend invented to explain its origin and by the evident symbolic meaning of the word *matsya*, *maccha* interpreted by the Kashmiri school as *pāśa* or *indriya* As regards this last point the śaiva tradition quite agrees with the buddhist according to which *mīna* has also a technical and mystical meaning; we read in fact in the commentary upon the Catuspīthatantra called Amitapada by Durjayacandra (third patala): *prajñāmakara-mīnakair iti sarvabhāvānām niḥsvabhāvatāprajñā tayā ca sar-vendriyāni prānini iva makaramīnakair vyāpādyante iti sādhar-myat prajñaiva makaramīnayate* It is also not out of place to note that in the *Mahākaulanirnaya* we find the form Macchyaghnapāda (*Nepal Catal* II, p 32, 33), which rests upon the meaning of the name as explained by the Kashmiri tradition The hypothesis is therefore, possible that the title *matsyendra* or its synonym was first given to Lui-pa, as it is stated by the Tibetan tradition, and subsequently taken by some of his followers assuming the definite character of a title or appellative. This evolution was already accomplished at the time of Abhinavagupta (X-XI sec ) This fact is not without a bearing upon the chronology of the siddhas as it shows that the first man to whom this appellative was given must have been much older than Abhinavagupta If the Tibetan tradition is right in identifying Lui-pā with Matsyendra we could have a *terminus a quo* as regards the age of this siddha : in fact, I find reference to *Lui-pā* in the Abhisamayamañjarī of Śāntiraksita, fol 3, 1 *tatah kava*.. .(?) *dvayam krtvā jñānacakravibhāvanam iti Luyī-pādokteḥ*

## IV

### The Gorakṣasaṃhitā and the Avadhūtagītā

Gorakṣasaṃhitā is one of the works attributed to Gorakṣa; it is known to me only through the edition in Bengali characters by Prasannakumāra Kaviratna (śaka samv. 1897).

It is composed of five aṃśas, the first four of which are nothing but a manual of haṭhayoga in which all the various *mudrās*, *āsanas*, *dhāraṇās*, etc., are described; apart some few exceptions, it does not contain anything new or what we do not find in other manuals of this kind, such as the Haṭhayogapradīpikā, the Gheraṇḍasamhitā, the Śivasaṃhitā, the Kālītantra, etc. But the fifth *aṃśa* is quite different in its contents; it is in fact a short philosophical treatise in the form of the gītā-literature, well written and extremely interesting for those who want to know the dogmatical and philosophical fundaments of these later mystical schools. It is evident that it has no connection with the rest of the work; while the other four parts are chiefly concerned with the *yoga* praxis, here we have an exposition of the absolute identity of the individual soul with the all; and this all is described, just like the dharmadhātu of later Buddhist schools, as *nirvikalpa*, *gaganopama*, *śūnya*. The supreme reality is *nirālambana*, but the *ālambanas*, which are mere *kalpanās*, may have a pure conventional value in so far as the yogins must have recourse to them in their progressive realization of the truth, but without *abhiniveśa* as they do not correspond to anything real[1] (cfr. the Yogācāra point of view as expounded for instance in the Abhisamayālaṅkārāloka) But, in fact, the truth or the absolute is *sahaja*, inborn.[2] In one word, we find here the ideas that are common to the Siddhas and to the Śaiva as well as to the Buddhist Tantras belonging to the same period.

Now it is doubtful whether this section belonged to the original redaction of the Gorakṣasaṃhitā or was added to it later. I have no access to other editions of the work or to manuscripts of it but this much I can say, viz, that the existence

---

[1] Cr. Gorakṣasaṃhitā 121.

*sūkṣmatvāt tadadṛśyān, nirguṇatvāc ' ca yogibhih*
*ālambanādi yat proktam kramād ālambanam bhavet*

The theory of the Abhisamaya is just based upon an extremely subtle classification of the progressive *ālambanas* which are the support of the meditation of the Bodhisattva aiming at the supreme illumination. One *ālambana* is purified and annulled by the assumption of a contrary—*pratipakṣa*—which has a mere conventional, momentary value, in so far as it is to be cleared off by a higher *ālambana* and so on up to the realization of the *śūnyatā*, which of course must be devoid of any *idea* of the *śūnyatā* or attachment to it because in this case there would be no *śuddhi*. All these topics have been fully discussed in the introduction to my edition of the Abhisamaya where the mystical theories of the tantras, Śaiva and Buddhist as well, have been studied together with the system of the *siddhas*.

[2] V. 90

*svabhāvasaṃvṛttir aham ca tattvam*
*ākāśakalpam sahajam dhruvam ca*

of the fifth *aṃśa* as an independent work[1] is a well established fact. This fifth part is nothing but the *Avadhūtagītā*, which is quoted as a distinct work in Gorakṣasiddhāntasaṅgraha p. 33 and related to the Gorakṣa-school But this attribution is not beyond contention: in fact in the printed text[2] we read the colophon: *iti śrīdattātreyakṛtāvadhūtagītā* and this attribution is general in the manuscript redaction, as I can guess from the bibliographical material at my disposal.[3] I must add that in a copy of the same work preserved in the Durbar Library of Katmandu, it is styled "Dattātreyagorakṣasaṃvāda." This fact while confirming the hypothesis that Dattātreya[4] was an historical personage, seems to show some connection between his doctrines and those of Gorakṣa and should not therefore pass unnoticed by future investigators of the religious sects and currents of ancient India. I must add in this connection that according to a passage of the Tantramahārṇava quoted in Gorakṣasiddhāntasaṅgraha (p. 44) *Dattātreya* is called Mahānātha and included among the eighty-four siddhas. This proves once more the complexity of this school called the Siddhas Though admitting some general principles accepted by all and which, therefore, represented a link among the followers of the sect, still, this school, as it always happened in India, was divided very soon into a series of individual interpretators and therefore into groups and subgroups, which we are no longer in a position to discriminate. This fact is well pointed out by the different lists of the Siddhas[5] handed down to us, which are Buddhist (Grub t'ob.; Bka' babs bdun ldan, Tāranātha, gSum pa mk'an po.) and Saiva (Varṇaratnākara, Haṭhayogapradīpikā) These Siddhas were not only claimed as their own masters by each of the two greatest currents of thought of medieval India, but in each current the various *saṃpradāyas* had their own list of Siddhas. This explains why so much discrepancy as regards their names is to be found among the lists that we have at our disposal and which can only be explained if we assume that they came to us from various sects representing particular tendencies.

## V

### A Sanskrit work by Siddha Carpaṭi

Carpaṭi is one of the eighty-four Siddhas His biography is preserved in the Grub t'ob where his name is given in the

[1] But the 33 first verses of the fifth *aṃśa* of the *Saṃhitā* are not in the *gītā*.

[2] By the Nirnayasāgara Press; but the same work is also included in the Bṛhatstotrasaritsāgara There is another Avadhūtagītā in Bhāgavatapurāṇa xi, 7–9.

[3] See Aufrecht's *Catalogue* s v

[4] See BARNETT—*Hindu gods and Heroes* p. 114.

[5] The number 84 induces suspicion; it is in fact one of the mys-

corrupt form Capari, in the bKa' babs bdun ldan in the History of Tāranātha p 106 and in gSum pa mk'an po i. 129. He is to be found also in the list of the Varṇanaratnākara and in that of the Haṭhayoga. While in Nepal I had the rare privilege of examining the rich collection of manuscripts gathered with great competence by His Honour the General Kesar Sham Sher Jung Bahadur One of these manuscripts contains a small work by Carpaṭi or rather a commentary—which is in fact a mere *bālabodhinī*—on a *stotra*, written by him. Since no other work from the pen of this Siddha is known to us it is perhaps interesting to give some information about it. The stotra is called "*Devamanusyastotra*" and it is a hymn to Avalokiteśvara. Lokeśvara. It seems to be in circulation even now among the Buddhist community of Nepal. That the small stotra is really by Carpaṭi[1] is stated by the commentator at the very beginning of his *ṭippanī*

> *karuṇāśūnyatābhinnamūrtim*[2] *advayam uttamam*
> *tratāram sarvalokānām name lokeśvaragurum*
> *śrīmanmeghamahāpātrapreraṇād vihitā mayā*
> *śrīśīlasāgareṇeyam carpaṭistututippaṇī*

Mention of the same is to be found also in the commentary on verse 16 "*mayā Carpaṭinā*" and verse 22 "*mayi Carpaṭau*." At the end of the *stotra* Lokeśvara is called *potalakācalavāsa*. As a whole the *stotra*, neither for its style nor for its contents, seems to be particularly interesting. The only thing which I like to quote here is the allusion to magical and alchemic practices which are quite characteristic of the literature connected with the Siddhas.

*añjanety ādi; he bhagavan yasya tvam tuṣyasi tasyāñjanagutikāpādukasiddhih sidhyati, na kevalam añjanagutikāpādukasiddhir eva sidhyati, siddhausadhimaṇimantravidhir api sidhyati na kevalam......sidhyati yakṣastrī ca tasya sidhyati, na kevalam etc, purapraveśo 'pi.*

As we saw before (p. 132) he is included by the author of the Gorakṣasiddhāntasaṅgraha among the 24 Kāpālikas.

This Siddha is not unknown in Indian tradition because we find mention of him in the Vamsāvalī of the Chambā State edited by Doctor VOGEL. (*Antiquities of Chambā State* 1, p. 81 ff.) According to this source he was held in high esteem by king Sāhila, who lived in the tenth century and with whom the real history of Chambā State begins. There is no reason, as Doctor Vogel also points out, for rejecting this state-

---

tical numbers in Buddhism as well as in the Tantras (12 zodiacal signs × seven planets ?)

[1] On the meaning of the name cfr. GRÜNWEDEL, *Edelsteinstimme* p. 120 note.

[2] It is known that *bodhicitta* in later mahāyāna and in Buddhist Tantras is twofold : it is the union of *karuṇā* and *śūnyatā*.

ment, which is indirectly confirmed by the Grub t'ob, where the connection of Carpaṭi with a king of Campaka is referred to. The mention of the same Siddha in an inscription of Ladak is too doubtful to be used for chronological purposes. (FRANCKE *Antiquities of Indian Tibet* II, p. 274.)

If this synchronism is exact, and the data furnished by the *bKa'. gbab bdun ldan* are based upon some historical tradition, we can fix the date of Mīnanātha by that of Carpaṭi because Mīna is said to have been the disciple of Carpaṭi.

## VI

### A SANSKRIT BIOGRAPHY OF THE SIDDHAS AND SOME QUESTIONS CONNECTED WITH NĀGARJUNA

With the exception of the lists contained in the Varṇanaratnākara and in the Hathayogapradīpikā and some scattered allusions to particular Siddhas to be found in the Gorakṣasiddhāntasangraha no connected account of these Siddhas is known to me to have been preserved in Sanskrit. Still if we are to judge from the Tibetan tradition some biographies there must have been. The Grub t'ob which has been translated by Grunwedel is the Tibetan rendering of a Sanskrit original the author of which was a pupil of Vajrāsana. Tarānātha, according to the statement of Sum pa mk'an po[1] drew his information from the works of Indradatta, Indrabhadra, and Bhataghadri, a statement which is supported by Tarānātha himself[2] Unfortunately none of these works has come down to us. This is a matter of regret because if such treatises do not seem to have been very important from the philosophical or literary point of view, still, if we are to judge from the Tibetan translations they contained much useful historical and geographical information But during my last visit to Nepal I was lucky enough to find a palm-leaf fragment of such a work. It belongs to the collection of His Honour the General Kesar Sham Sher Jung Bahadur Rana who most graciously allowed me to take a copy of the same. For this and for having shown me the treasures contained in his rich collection of manuscripts I express my most sincere thanks to him

The booklet is a mere fragment, the style of which is defective · perhaps it was a kind of *guruparamparā*, written without literary pretension by some disciple. But it shows a division into āmnāyas or mystical schools, just as we find is the bKa' babs bdun ldan, with which it shows to have many points of contact, as remarked by me in the notes. This is

[1] See dPag bsam ljon bzang p 131. *Geschichte* p 281 Kṣemendrabhadra of Tarānātha is, perhaps, the same as Indrabhadra.

[2] P. 123. When we compare bKa' gbab l.dun ldan, life of Maitri, with our fragment, we shall easily perceive that they are strictly related.

a new proof that the Buddhist tantras and the later development of mahāyāna Buddhism were divided into a great number of tendencies each one of which had its masters and its acknowledged texts. The classification of this material according to the various āmnāyas must be the first task of the scholars, when they begin to investigate this neglected branch of Indian mysticism, which I should like to call rather Indian gnosticism, inasmuch as one of its fundamental features is the attempt to harmonize Buddhist and Hindu religion into a kind of syncretism chiefly expounded by the Tantras.

The second point which deserves mention is that we find here some information about Nāgārjuna. We shall discuss later on whether this Nāgārjuna is the mādhyamika teacher or another. Practically, all the information is about his birthplace and his parents, because the author seems to consider him as chiefly a second Buddha, the founder of the mystical school. On the other hand, some other well-known Siddha, like Advayavajra with whom the fragment seems chiefly concerned, is considered as a manifestation of Nāgārjuna or rather of his *vajrakāya*. If, in fact, we read the fragment carefully, two things will appear: (*a*) that many *Siddhas* are held to be the incarnation of one and the same personage—in this case Nagārjuna, (*b*) that every master took a different name as soon as he was initiated to a special school, so that one and the same man may in fact be known under various names As regards the first point our text states that Nāgārjuna was born in Karahāṭaka according to a prophecy of Buddha, but then, another of his incarnations *vyākṛtād aparam matam* [*nāma*] is referred to, viz., that as Dāmodara who, as said at page 152 was born in Kapilavastu and who, according to fragment VI is Advayavajra. Moreover, he appears as Ratnamati, and as Advayavajra, who, if we are to follow the marginal gloss, is also called in the text by the very name "Nāgārjuna." All these various names are dependent on the different *adhiṣṭhānas* or *vidhis* or *anugrahas*, and deserve our notice because it appears evident, that the school from which our text issued, believed in the theory of the periodical reincarnation of the same bodhisattva as it is the actual dogma of Tibet.

As to the second point we find, for instance, that Dāmodara, after having completed his studies of the *Sammatīya*-(*Sammitīya*) *nikāya* receives the name Maitrīgupta, while later on when he has the direct vision of Vajrayoginī [? p. 153 *sākṣād-darśanam bhavati* only, but p. 149 *vajrayoginyādhiṣṭhita*] he becomes Advayavajra: *Advayavajro 'bhūt*. This fact is proved by his works preserved in the bsTan agyur in which we find his name in different forms: Avadhūtīpā, Maitrīgupta, Advayavajra. This implies that the various masters took different names, according to the various *abhi*-

*sékas* received or the *sampradāyas* to which they were initiated. This system, which was introduced into and is up to this time practised in the monasteries of Tibet, complicates the real attribution of many mahāyāna works of later time to their real authors Moreover, these names have a symbolical meaning or denote a particular stage of knowledge or of saintliness and therefore are likely to have been given to various individuals [1] So we have at least two Vimuktisena's, two Āryadevas, etc. Such also are the names in which the word *śūra* appears "*ayam bodhicittaśūro dānaśūro śīlaśūraḥ vīryaśūraḥ dhyānaśūraḥ prajñāśūraḥ samādhiśūraḥ*" (Śikṣāsamuccaya p 16): "*Kalyāṇamitreṣu śurasamjñā*" (ib. p. 36, etc.) or those composed with nāga; of Mahānāga is one of the adjectives used for those who are present to a *saṅgīti* The word is so explained by Haribhadra (p. 11): *traividyādivaviśiṣṭa dharmādhigamayogān mahāpradhānabhāvena, mahānāga.* or (p. 12) *kleśasaṅgrāmavijayitvān mahānāga.*

The *Mahāprajñāpāramitāśāstra* by Nāgarjuna also comments (Taisho edition. Vol XXV, p. 81): "*mahā* means great, *na*=not; *ga*=sin Or also: nāga means either dragon or elephant. These five thousand arhats have a far greater power than all other arhats and therefore are called dragons or elephants. The dragons have great power of going in water; the elephants have great power of marching on the hill)..  .".

These two points deserve mention. We know, in fact, that in the bsTan agyur there is a great number of Tantric treatises attributed to Nāgārjuna. More than that; the same *sampradāya* of Nāgārjuna. as known to us from Chinese sources, the most ancient now accessible to us, is met with in the Tibetan tradition concerning the Tantric Sects. I mean to say that we find the series: Nāgārjuna, Rāhulabhadra Āryadeva as the authors of many treatises absolutely tantric and describing rituals, *mudrās*, *kramas*, quite peculiar to the tantric sects but which, though based generally upon the dogmatical teachings of the Mādhyamika school cannot be considered as old as the great Acārya Nāgārjuna.

This implies that some masters of the *Siddha-sampradāya* considered themselves or were considered by their disciples as the manifestation (Tib. *rnam a'prul.*) of the first ācāryās as fully evidenced by our text and were given the same name. This fact explains quite well the contamination which we may trace between the biographical accounts of the older masters as given in the Chinese sources and those preserved in the Tibetan tradition In this way we are also able to understand why

[1] That some names were peculiar to some schools only has been already noted by LAUFER, *Bruža Sprache* p. 9, n. 2.

the various Siddhas are known to our sources under different names, while the information about them is very often contradictory. Rāhula in the Grub t'ob is a *śudra* from Kāmarūpa, but there also Rāhulabhadra is the name of Saraha; on the other hand, in the bKa' babs bdun ldan, Rāhulabhadra is a brāhmaṇa of Oḍiviśa. Āryadeva is another name for Vairagīnātha or Karṇari or Kanheri which is explained as "kāṇa" and gave origin to a legend almost the same as that related in connection with the old Kāṇadeva-Āryadeva of the Chinese tradition. Moreover, we have one Nāgārjuna or Nāgabodhi (Grub t'ob 16), one Nagabodhi who according to Tāranātha (p 86) was the disciple of Nāgārjuna, and to the series we may add the Nāgāhvaya of the Laṅkāvatāra [1] and Mañjuśrīmūlakalpa and the Nāgārjunagarbha, author of a medical work [2] That there were two Nāgārjunas has been clearly pointed out by Dr. Bonoytosh Bhattacārya [3] and this view is supported by the comparative study of the material at our disposal, the remarks made above and even by the brahminical tradition.[4] The relation between the various masters seems also to lead to the same conclusions. The bKa' babs considers Rāhulabhadra as the master of Nāgārjuna, but this is contradicted by the statement of the Chinese sources which show Rāhulabhadra as the disciple of Nāgārjuna.[5] In the same book, instead of Āryadeva, Śāvari is given as his disciple but this Śāvari is at the same time called at p. 20 Saraha the junior and we saw that according to the Grub to'b Saraha is the same as Rāhulabhadra. In the "history of Buddhism"

---

[1] On these passages cp. WALLESER *The life of Nāgārjuna* in "Hirth anniversary volume".

[2] CORDIER, *Catalogue.* III p. 462.

[3] Introduction to the Sādhanamālā p. XLV ff.

[4] Gorakṣasiddhāntasaṅgraha, which knows Malayārjuna, p. 19, Nāgārjuna, Sahasrārjuna p. 44.

[5] Ui, *Studies in Indian philosophy* (in Japanese) p. 341–354.

The old Rāhulabhadra is the author of the Prajñāpāramitāstotra which is published in the beginning of the Aṣṭasāhasrikāprajñāpāramitā. The authorship of this stotra is beyond contention (cf. Journal and Proceedings R.A.S.B., 1910 p. 425).

As regards the antiquity of that small work no doubt is possible, inasmuch as it is incorporated in the Ta che tu lun, the Mahāprajñāpāramitāśāstra, the Commentary upon the Śatasāhasrikāprajñāpāramitā written by Nāgārjuna and translated into Chinese by Kumārajīva This quotation proves that the literary activity of Rāhulabhadra began when his master was still alive. Further precision as regards his time is derived from the fact that verses from him, as pointed out by Ui, are to be found in Sthiramati's Mahāyānāvatārakaśāstra and Asanga's works. I must add that he is quoted also by Vasubandhu in his *Pratītyasamutpādavibhaṅga* a fragment of which has been brought by me from Nepal and is being edited in J.R A.S.

In the Chinese biographical accounts no mention is made of Nāgārjuna's *guru*. He learns the Mahāyāna from the Nāgas, but Rāhula or

we have also Rāhula as the first master, then Nāgārjuna, then Āryadeva, Nāgabodhi and Nāgāhvaya.[1] In the Grub t'ob the synchronism is still different. We have in fact the following succession; (for which cp. also CORDIER, *Cat.*, III, p. 127).

Nāgārjuna

| Nāgabodhi | Vyāḍi | Kubjika | Pañkaja |
|---|---|---|---|
| | Kambala | | |
| | Indrabhūti. | | |

Here we are on a better ground; in fact, we know that Indrabhūti is connected with Padmasambhava whose time is relatively known (he went to Tibet towards the end of the first half of VIII century A.D.). On the other hand the relation with Vyāḍi the alchemist, stated here, shows that the Siddha Nāgārjuna, whose name and fame were also known to Alberūnī during his travels in India, is unmistakeably referred to.[2] So that we can safely assume with Doctor Benoytosh Bhattācārya that the Alchemist or Siddha Nāgārjuna lived in the VII century A.D. But even then, we cannot state whether the Alchemist Nāgārjuna is the same as the author of many tantric works preserved under his name in the bsTan agyur. That the Siddhas were all connected with the *rasaśāstras* or alchemy,[3] there is no doubt, but considering the long series of names beginning with Nāga which we find at this time and in the same school we

---

Āryadeva is given as his disciple. We have therefore these two different *paramparās*,

Ch. (a) *Nāgārjuna, Rāhula, Āryadeva*
(b) " " *Āryadeva, Rāhula,*

Tib. *Rāhula — Nāgārjuna* { *Nāgabodhi, Nāgāhvaya, Āryadeva, Vyāḍi, Śabara.*

[1] In our text also Śabara receives the initiation from the Siddha Nāgārjuna, and if we are to judge from what is written at p. 149 he is also called Saraha.

[2] But the statement of Alberūnī (who visited India about 1030 A.D.) that Nāgārjuna the alchemist, lived about one century before his time cannot be accepted; in fact allusion to Nāgārjuna can be traced as early as the VIII century (JOLLY, *Festschrift Windisch*). So the conclusion seems inevitable that Alberūnī's Nāgārjuna is the same as that of whom allusion is made in our Sanskrit fragment.

[3] I refer to the biographies of the Grub t'ob as well as to the fact that many books of medicine or alchemy have the name Siddha appended to

cannot advance any definite theory until the works preserved in the bsTanagyur are comparatively studied and all the evidences preserved, chiefly in Tibet, investigated. Moreover the *guruparamparā* as given in our text points out the existence of another master called Nāgārjuna. In fact, though our fragment is far from being very clear, it seems almost certain that he follows this order

Nāgārjuna
|
Śabara
|
Advayavajra (Dāmodara, Maitrīgupta)

The latter is connected with Sāgara, Ratnākaraśānti Naropā, etc. The dates of Ratnākaraśāntī, Naropā (about whom there is a large literature in Tibetan) and Advayavajra are known. This synchronism leads to the conclusion that the Nāgārjuna here referred to must have flourished about the beginning of the X century A.D. This agrees, as we saw, with a statement contained in Alberūnī's Travels. So we have three different sets of texts which seem to have preserved information about three different masters equally known as Nāgārjuna: (*a*) Chinese documents referring to the Mādhyamika teacher, (*b*) Grub t'ob probably referring to the Siddha Nāgārjuna, (*c*) our text concerned with another tantric Nāgārjuna. One could suppose that these two sources are connected with one and the same teacher; but this doubt seems hardly possible because the synchronism with other masters given in both texts, unmistakably shows that we are concerned with two different periods. We may therefore conclude that there were various, more than two Buddhist teachers called Nāgārjuna or with some similar name, who lived at a different time, though we are not yet in a condition to state what are the works preserved in Tibetan which may be ascribed to one or to the other of these writers known as Nāgārjuna, Nāgabodhi, Nāgāhvaya, Nāgārjunagarbha, because the accounts and the tradition concerning them are confused. Anyhow the fact seems certain that the tantric works as a whole have no connection whatsoever with the founder of the Mādhyamika doctrine. This will appear evident when the various treatises attributed to him will be investigated. But from the study of the commentary upon the Guhyasamājatantra—to speak of one of the most prominent works circulating under his name—it appears evident that this is a later work. It insists upon the tantric system of the Yoginīs, perhaps introduced from

---

their title—Cf. Siddhiyoga, Siddhasāranighaṇṭu of Viṣṇugupta, Siddhasārasaṃhitā of Ravigupta (Nepalese Catalogue by Haraprasāda Shāstrī X. ff.).

Uddiyāna, and it begins with an elaborate discussion upon the *abhidhāna abhidheya* and *prayojana* of the Guhyasamāja, that is with topics that we never meet in the commentary—literature before the time of Dharmakīrti Moreover the general dogmatical theories underlying the work are chiefly Yogācāra more than Mādhyamika and Ārya Maitreya is quoted there, which fact is sufficient to dispel any doubt as regards the necessity of considering the author of this commentary as quite different from the Mādhyamika teacher because it is known that Maitreya commented upon the Bhavasaṅkrānti (bsTan agyur, mdo, XVII, CORDIER. *Catalogue* III, 295) written by Nāgārjuna while the first kārikās of the Mādhyamikakārikās were commented upon by Asaṅga, the disciple and younger contemporary of Maitreya.

What I have said explains also the difference which we find in our sources as regards the birth-place of Nāgārjuna. Kumārajīva in his life of Nagārjuna [1] just as the book of the tradition of the law translated by Ki Kia ye [2], states, that he was born in South India, without specifying the place; according to Yuan Chwang he was of South Kośala.[3] The bKa' babs bdun ldan says that Vidarbha in the south was his birth-place. These sources refer perhaps to one and the same Nāgārjuna, viz., the Mādhyamika teacher The Grub t'ob, on the other hand, tells us that the birth-place of Nāgārjuna was Kahora [4] This second group refers undoubtedly to the Siddha Nāgarjuna, who is also nearer in time to the compilers of the works in which he is mentioned. Our text speaks of Karahāṭaka. In this connection, I must refer to another source also; I mean the Mahāmeghasūtra which was translated into Chinese for the first time by *Dharmakṣema between 414 and 421 A.D. under the title 大方等大雲無想經 Mahāvaipulyamahāmegha-asamjña-sūtra, which was sometimes considered in China as a forgery made in China on account of a prophecy which was said to refer to the Empress Wu Tse-t'ien of the T'ang dynasty (684–704). But as a matter of fact, as M. Démieville has demonstrated [5] there is no ground for such a doubt. I myself have compared the Chinese with the Tibetan translation included in the bKa' agyur (mdo VIII. 2) and found that there is a general agreement between the two translations, though of course there is no doubt that they were based upon two

---

[1] For its contents cfr. WALLESER. *art. cit.* and WATTERS, *Travels*, II, 20 ff.

[2] *Ibid* [3] Cfr WATTERS, *Travels* II. p. 204.

[4] Modern Karad in the district of Satara; cp. for references S. LEVI *Le Catalogue des yakṣas dans la Mahāmāyūri*, J. A 1915, p. 93 ff.

[5] *Le aversions chinoises du Milindapañha* BEFEO, 1924, p. 218 ff.

different redactions of the same work. In the 37 skandha there is a prophecy in which the Buddha says that after his nirvanā the time will come when a bhikṣu is to preach again the doctrine and protect the declining law. This passage has been fully translated by M. Démieville. It says that 1200 years after the nirvāṇa the great bhikṣu will appear in South India, at the time of a king called Satavāhana 娑多婆呵那 So to p'o ho na. He will be born in the kingdom of Siu lai ch'a Surāṣṭra, in a village called flower-garland, (for which M. Démieville proposes *Kusumamālā or Sumanamālā*) near the river 善方便 "good means" (Démieville proposes: *Sūpāya*). This bhikṣu, "this great Nāgarāja" will sacrify his life in order to protect the law. No direct mention of Nāgārjuna is made here; but the allusion to king Sātavāhana and to the sacrifice of his life of which there is mention in all the biographies of the mādhyamika teacher leave very little doubt that the prophecy contained here refers to Nāgārjuna.

Of course the statement concerning his time, viz, that he lived 1200 years after the nirvāṇa of Buddha is rather puzzling, because in no text such a later date is ascribed to him as can be seen from the following table.

| Mahāmāyāsūtra[1] *760* years | Preface of Sen-jui to the Tattvasiddhiśāstra[2] 530. | Account on the[3] transmission of the law. No date, but following order: Asvaghoṣa, Kapimāla, Nāgārjuna, Kānadeva, Rāhula. | |
|---|---|---|---|

But if we turn to the Tibetan translation of the same work we find that the prophecy is equally contained there, though the names and the date do not agree with the Chinese text. This will appear evident from the comparison with the essential points of the passage in question as it appears in its Tibetan rendering.

(fol. 287, 6) ལྷའི་བུ་དགའ་ང་འདས་པའི་འོག་ལོ་བརྒྱ་ཕྲག་མང་པོ་

འདས་པ་ན་ལྷོ་ཕྱོགས་ཀྱི་རྒྱུད་དུ་མཁར་གྱི་རྒྱལ་པོ་བརྒྱུད་པ་གསོ་བ་ཞེས་

[1] Taishō Edit., Vol. XII, p. 1013.

[2] The passage is quoted also by Ki-tsang in his commentary upon the Śataśāstra, Vol. XLII, p. 233.

[3] Taishō ed., Vol. L, p. 316 ff.

བྱ་བ་འབྱུང་བར་འགྱུར་རོ། དེའི་ཚེ་ལོ་བརྒྱད་ཅུ་ན་དམ་པའི་ཆོས་ནུབ་
པར་འགྱུར་བའི་ལྷག་མ་ཙམ་དུ་ལུས་པའི་དུས་ལ་བབ་པ་དེའི་ཚེ་ངའི་ཉན་
ཐོས་འབྱུང་བར་འགྱུར་ཏེ། དམ་པའི་ཆོས་ཀྱང་འཛིན་པར་འགྱུར། ཆོས་
ཀྱི་འཁོར་ལོའང་བསྐོར་བར་འགྱུར། ཐེག་པ་ཆེན་པོའང་གཞན་དག་ལ་
རྒྱས་པར་འཆད་པར་འགྱུར་རོ། ... ... ... ... ... ...

མཐོང་ན་དགའ་བ་ཏྲི་ཟའི་རྒྱལ་པོ་ང་འདས་པའི་འོག་ཏུ་ལྷོ་ཕྱོགས་
ཀྱི་རྒྱུད་དུ་དྲང་སྲོང་བྱི་པོ་ཞེས་བྱ་བའི་ཡུལ་འཁོར་དུ་བསོད་ནམས་དང་
ལྡན་གྱི་གྲོང་བྱེ་མ་ཆེན་པོ་ཞེས་བྱ་བ་འགྱུར་སྟེ། གྲོང་དེའི་འབབ་ཆུ་
མཛེས་འགྲོར་ཅེས་བྱ་བ་དེའི་བྱང་ཕྱོགས་ཀྱི་འགྲམ་དུ་འབྱུང་བར་འགྱུར་
རོ། དེར་ཧྲེཙུ་རིགས་ཆེན་པོ་རྣམ་པར་དག་པ་འབྲ་གོ་(?)ཅན་ཞེས་བྱ་བའི་
ཕྱོགས་སུ་འབྱུང་བར་འགྱུར་ཏེ། རང་གི་སྒྲོག་དང་བསྒོམས་ནས་དམ་པའི་
ཆོས་སྟོན་ནོ། ... ... ... ... ... ... ... ... ...

First of all instead of one thousand and two hundred years after the nirvāna of Buddha, the text followed by the Tibetan translators makes him live "many hundred years after the nirvāṇa," without further specification. As to the name of the king under whom this *bhikṣu* was to be born our Tibetan text gives the form; *brgyud pa gso ba*, viz. *vaṁśa* (or *tantra*) + *puṣṭi* or: *puṣṭa-vaṁśa*. We have here a form which we cannot at any rate consider as being equivalent to Satavāhana for which we have: *dge byed* or *bde spyod*. Nor is there any agreement as regards the country where this *bhikṣu* is supposed to be born; while the Chinese reads Surâstra, in Tibetan we have the name: *draṅsronbyibo*. Here the first element of the compound corresponds to "ṛṣi". As regards *byibo* this word is unknown to Chandra Das, but Desgodins Dictionary registers *byibo* as = *byis pa.* = boy up to 16 years, *bāla*, *kiś-ora* which would give a form like: *ṛṣibāla*

The name of the village sounds also completely different in Tibetan: *byemac'enpo* corresponds to *mahāsikata*, *mahāvāluka*.

Only the name of the river seems to agree in both redactions. *mdses ąbyor* corresponds to *suprayoga:* and this also can be the original of the Chinese 善方便 because 方便 is not only = *upāya*, but also (and chiefly in logical treatises) "*prayoga*".

So we have no grounds for affirming that the Mahāmegha-sūtra, in the redaction known to the Tibetan translators, contains a prophecy of Nāgārjuna, the mādhyamika teacher; and this quite agrees with the fact that Sum pa mk'an po quotes only two *vyākaranas* concerning the great ācārya, as contained in the sūtra-literature I mean the Laṅkāvatāra and the Āryamañjuśrīmūlakalpa The prophecy of the Laṅkāvatāra, as shown by Prof Walleser, is to be found in the *Sagāthaka*-chapter, which cannot be considered as belonging to the older redaction of the text, since it does not appear in the translation by Guṇabhadra (A.D. 443) but only in those of Bodhiruci (A.D. 513.) and Śikṣānanda (A.D. 700–704) No definite conclusion can therefore be drawn even from this passage, not only on account of its later date, but also because we do not find there the name Nāgārjuna but the form Nāgāhvaya. Though this name is translated into Chinese as Lung-shu, used generally to render Scr. Nāgarjuna[1], we cannot at all state that the compiler of this portion meant the same doctor whom we usually know as Nāgārjuna; not only the Tibetan tradition, as we saw, distinguishes Nāgāhvaya from Nāgārjuna, but the Sanscrit text itself considers Nāgāhvaya as a proper name, not as a designation, *nāgāhvayaḥ sa namnā*.

To sum up, the biography published here does not throw any light upon the life of Nagārjuna: it is not even concerned with him, but chiefly with Advayavajra supposed to be one of his manifestations. But it shows at the same time how confused is the tradition concerning the great *ācārya*, and how dangerous it would be to infer from the mere homonymie the identity of the very many personages called Nāgārjuna or having some similar name. The facts here collected and the remarks made above are at any rate sufficient to prove that we must distinguish the philosopher Nāgārjuna from the tantric; and this does not preclude the fact that between them a third doctor Nāgāhvaya or Nagābodhi or Nāgabuddhi existed, about whom we cannot say anything precise, because he was identified by later traditions either with his predecessor or with his successor.

This distinction is so much more necessary when we remember that the date of Nāgārjuna has been taken as a

[1] So also in the quotation of the passage in the commentary of Ki-tsang on 中論 Chung Lun, Taishō ed., Vol. XLII, p. 1.

point of repair for fixing the date of other works or other writers.[1]

(1)

नमो मञ्जुवज्राय ॥

मञ्जुवज्रं प्रणम्यादौ नाथपादमनन्तरम् ।
श्मनसिकाराम्नायं वक्ष्यते सुमहोदयम् ॥ १ ॥

संबुद्धा बोधिसत्वाश्च सिद्धास्तैरनुशासिताः ।
अभिषिक्तास्तथेत्येषामाम्नायक्रम इष्यते ॥ २ ॥

तत्रादौ धर्मचक्रेऽस्मिन् श्रावकैः [2]परिवारितः ।
उपतस्थे स भगवान्दिग्भ्यारमिताविक्रम् ॥ ३ ॥

ततस्तांश्च परित्यज्य गतवान्दक्षिणापथे ।
निर्माय धर्मधात्वाख्यं मण्डलं सुमनोरमम् ॥ ४ ॥

नायकः स्वयमेवात्र बोधिसत्त्वाश्च षोडश ।
नायकाश्चाभवन्नष्टौ तथाष्टावुपनायकाः ॥ ५ ॥

नामतस्ते निगद्यन्ते क्रमतो मण्डलस्थिताः ।
मण्डलं तु गुरूद्दिष्टं [तत्सदा][3]म्नायसङ्कृतम् ॥ ६ ॥

मैत्रेयः क्षितिगर्भश्च वज्रपाणिः खगर्भकः ।
लोकेश्वरश्च मञ्जुश्री सर्वानिवरणस्तथा ॥ ७ ॥

[1] So, for instance, when Ḍallana (*Suśruta*, ed. by Jīvānanda, p. 2) tells us that Nāgārjuna revised Suśruta we cannot jump to the conclusion that here the Nāgārjuna contemporary of Kaniṣka is alluded to. Against this view, accepted by Jolly, we must oppose that the Tibetan and even the Indian tradition seem to connect the medicine-treatises and the reform perhaps of Indian medicine to the Siddha Nāgārjuna. I cannot have here in India access to the sources speaking of the "Nāgārjuna Bodhisattva's prescriptions" alluded to by WATTERS, op. cit., II, p. 206; it would be interesting to see if this work has any connection with the Nāgārjunīya-Kakṣapuṭa or Siddha-Nāgārjuna Kakṣapuṭa of which I know only a very bad edition in Bengali characters edited in the monthly Magazine Aruṇodaya. This work, as edited, has no relation with the Tibetan translation of a Kakṣapuṭa equally ascribed to Nāgārjuna.

[2] MSS. kaipari.

[3] MSS. gra(?)tadāmanāmnā.

समन्तभद्रचन्द्राभसूर्याभामलकीर्तिना ।
विमलप्रभस्तथा धर्मोद्गतरत्नमतिस्तथा[1] ॥ ८ ॥

व्योमगञ्जश्च सुधनो [2]मञ्जुश्रीश्च यथाक्रमम् ।
अभिषेकं ततस्तेषां दत्त्वा पारमितादिकम् ॥ ९ ॥

समर्प्य शाक्यसिंहेन व्याहृतः शासनेऽमुना ।
आर्यनागार्जुन इति भविष्यति महामतिः ॥ १० ॥

प्रवर्तव्यमनेनापि धर्मचक्रप्रवर्तनम् ।
दक्षिणापथदेशेऽस्मिन् पत्तने करहाटके[3] ॥ ११ ॥

ब्राह्मणस्य कुले जन्म पिता चास्य त्रिविक्रमः ।
माता सावित्री[4]नामास्य व्याहृतादपरं मतम् ॥ १२ ॥

दामोदरेति विख्यातो भिक्षुत्वे शाक्यमित्रकम् ।
नामापरं रत्नमतिरनुग्रहविधौ स्थितः ॥ १३ ॥

आज्ञा अद्वयवज्रेति वज्रयोगिन्यधिष्ठितः ।
सरहः सिद्धिभक्तेन तदनुग्राहको भवेत् ॥ १४ ॥

अस्य चानुग्रहात्पूर्वं तेन कारि च नाम तत् ।
ततः श्रुतं हयग्रीवं पश्चा[ज्जगाम][5]दर्शनम् ॥ १५ ॥

रत्नमतिना च समं वरेन्द्रां प्रस्थितः पुनः ।
लेखयित्वा प्रतिच्छन्दं बोधिसत्त्वस्य [6]धीमतः ॥ १६ ॥

पूजां प्रतिदिनं तस्य कृत्वा नागार्जुनो[7]ऽवसत् ।
ग्रामे देव[8]पुराख्ये तु एकान्तः सुसमाहितः ॥ १७ ॥

---

1 *Sic.* MSS But verse defective.  2 *Sic.*

3 See note 4, page 144

4 Ex. cf. MSS. Sāvitta; cfr. page 28  5 Suppl. ex. cf.

6 Perhaps Nāgārjuna is meant here; but according to the gloss Advayavajra is the man who designs the image (*praticchanda*) of him, for his daily *pūjā*. This seems impossible inasmuch as the *nataputra* is to become Śabara the *guru* of Advayavajra, as shown in VI. It is also contradicted by the Tibetan authority referred to in note 1, p. 150.

7 अद्वयवज्र marginal gloss.

8 The reading of the MSS. seems sure; but I am unable to locate this place in Varendra.

लोको नाम नटस्तस्य गौरी च सहचारिणी[1] ।
तयोः पुत्रः त्रिशरण आर्यम[2]ध्येषते परम् ॥ १८ ॥

रत्नमतिन्द्रर्शयति स तमाह[3] न पश्यसि ।
ज्ञानस्यायेन[fol. २-a.]विकलः कथं तं पश्यसि ज्ञानात् ॥ १९ ॥

तत्रत्याह त्रिशरणात्वं [4]मेऽनुग्रहं कुरु ।
यथा पश्यसि तं नाथं ज्ञानचक्षुरतीन्द्रियः ॥ २० ॥

आर्यनागार्जुनाज्ञां प्राप्य सिद्धस्तदाभवत् ।
बोधिसत्त्वेन[5] च ततो ऽनुगृहीतो यथार्थतः ॥ २१ ॥

मनोभङ्गचित्तविश्रामौ[6] पर्याख्यानं विवेचितम् ।
आक्रान्तिं शबरस्यासौ दधन्निवसति स्म सः ॥ २२ ॥

इति बुद्धबोधिसत्त्वसिद्धानामाम्नायः समाप्तः ॥[7]

(II)

इन्द्रभूतिपा । ओड्डिनी[8] । वज्रयोगिनी । तिलोपा । नारोपा । अद्वयवज्रपा । ध्यायीपा । महापण्डितामोघश्री । अथवा शबरनाथ । अद्वयवज्र । वज्रपाणि । पैलहपातिक । पण्डितोऽभयाकरगुप्त । पुनर-द्वयवज्रस्येति ॥

---

[1] In this account Trisárana who is to become Sābara, and Sābareś-vara—is said to be a son of a *Naṭa* called Loka and his wife *Guuri*. But in the account of Sumpa mk'an po CXXXI,—who equally makes him a disciple of Nāgārjuna during the latter's residence in Bengal.—Lokī and Gunī are said to be his wives.

[2] नागार्जुनम् marginal gloss.

[3] नटपुत्रम्.

[4] तम् is नागार्जुनं according to the marginal gloss.

[5] नागार्जुन marginal gloss.

[6] On these two mountains see p. 153. For this story cfr. also bKa, bab bdun ldan, p 23–24. The verse here also is defective.

[7] Here ends the first āmnāya. The *guruparamparā* which follows must belong to it, if we are to judge from next Chapter's List.

[8] Probably Lakṣmīkarā.

(III)

व:¹करुणा उपायचक्रम्। ञः शून्यता। तयोरेकं देयः।

“ वाग्व्यतीतवाकारो राकाराकारवर्जितः ”।

हेत्वनुपलब्धिर्हीकारो वाराही वज्रपूर्विकेति परमार्थविशुद्धिः ॥

कायवाक्चित्तविशुद्ध्या त्रिकोणम्। हेतुफलयोरभेदत्वात्त्रिकोणं तुल्यता धर्मोदयेति ॥ [२-२]

(IV)

नमः श्रीवज्रयोगिन्यै ॥

प्रथमं बाह्यपूजा सिन्दूरेण। असम्भवे मन्त्रेण। स्वहृदि सूर्यस्थ-हूंकाररश्मिभिराकृष्य प्रवेश्य पुष्पादिभिः संपूज्य तदनन्तरं जगच्छून्यीकृत्य। शून्यतानन्तरं झटिति। आत्मानं भगवतीं² भावयेत्, पर्वत³शिरोपरि नानापुष्पोपेताम्। सूर्यस्थहूंकाररश्मिं संस्मार्य श्वासवातो यथाऽदर्श-वद्योगः(?)। अमृतास्वादनं वशीकरणे पर्वतादिकं पारद⁴सदृशं भावयन् वामनासापुटेन पिबेत्। त्रिकालं बलिभावना कर्तव्या। यथादित्यो बालतयाद्यनपेक्षं स्वकिरणैः पर्वतमाक्रामति, तथा भगवतीपर्वताक्रान्तं ⁵भावयेत्। अमृतमास्वादयेत्। शिष्यानुग्रहे जिह्वायां मन्त्रमभिलिख्य, स्वहूंरश्मिनादं प्रवेश्य आवेशयेत्।

(V)

वज्रयोगिनीगुरुपरंपरा ॥ शबरनाथ। सागरदत्त। विजयघोष। अनङ्गवज्र। विसो। पैण्डपातिक। पण्डितविनयगुप्त। महापण्डित-वागीश्वर। अवधूतसुधनश्री ॥ लीलावज्र। ललितवज्र। कोविहार-पण्डितपादाः ॥ नमः सर्वज्ञाय ॥

---

¹ Here the mystical meaning of the word Vajravārāhī is given; but the *āmnāya* which follows is in fact connected with Vajrayoginī.

² Viz., Vajrayoginī; identity of *sādhaka* and *sādhya* is essential in Tantric Buddhism and it is based upon the theory of *sarvasattasamatā* fully developed by the Mahāyāna dogmatics and chiefly by the Buddhagotra-School.

³ *Meru*: is=*merudaṇḍa*, *sūrya*=*piṅgalā* *soma*=*iḍā*; in this passage the *antaryāga*, *ādhyatmikapūjā* is described.

⁴ ex. cf. MSS. पाद्द.

⁵ It is necessary to understand: *ātmānam* or to correct: *tiṃ parvatākrāntām*.

(VI)

नमः श्रीवज्रेश्वराय ॥ इह खलु मध्यदेशपद्मकपिलवस्तुमहानगर-
समीपे झाटकरणी नाम पल्लिकाऽस्ति। तस्मिं स्थाने ब्राह्मणजातिर्नानूका
नाम ब्राह्मणी च सावित्री [1]नाम प्रतिवसति स्म। तदा च कालान्तरेण
दामोदरो नाम[2] तत्पुत्रो बभूव। स चैकादशवर्षदेशीयः कुमारः सामार्थ-
वेदको गृहान्निष्क्रम्य मतंबोधो नामैकदण्डोऽभूत्। ततः पश्चाल्ली-
कटीसत्त्वे[3] पाणिनिव्याकरणं श्रुत्वा सप्तवर्षपर्यन्तेन सर्वशास्त्रमधिगम्य
विंशतिवर्षपर्यन्तं नारोपादसमीपे प्रमाणमाध्यमिकपारमितानयादिशास्त्रं
श्रुतम्। तदनु मन्त्रनयशास्त्रश्रवणेन रागवज्रेण सहाऽवस्थितः पञ्च-
वर्षपर्यन्तम्। पश्चान्महापण्डितरत्नाकरशान्तिगुरुभट्टारकपादानां पार्[4]श्वे
निराकारव्यवस्थां श्रुत्वा वर्षमेकं यावत्। पश्चाद्विक्रमशीलं गत्वा महा-
पण्डितज्ञानश्रीमित्रपादानां पार्श्वे तत्प्रकरणं[5] श्रुतं वर्षद्वयं यावत् ततो
विक्रमपुरं गत्वा संमतीयनिकाये मैत्रिगुप्तनाम[6] भिक्षुर्बभूव। सूत्राभि-
धर्मविनयञ्च श्रुत्वा वर्षचतुष्टयं यावत्पञ्चक्रम[7]ताराज्ञायेन मन्त्रजापं कृत्वा
कोटिमेकं चतुर्मुद्रार्थमहितेन भट्टारकस्वप्ने गदितम्। "गच्छ त्वं खस-
र्पणम्"। [8]तत्र विहारं परित्यज्य [9]सर्यणां गत्वा वर्षमेकं यावन्निषीदति।

[1] But cfr before, p 149 n 4. [2] Cfr supra. 149.

[3] So the MSS but the reading seems corrupt: is it to read: *likaṭīsātantra*, viz., the system of *likaṭīśa*, etc., considering *likaṭīśa*, as a corrupt form for *laguḍīśa*, *lakulīśa* *nakulīśa*? It can be also the name of his guru: in this case we need . *pūrśve* or such like form.

[4] For all these particulars cfr. the biographical account in bKa' bab bdun ldan, p. 23 ff There also it is stated that before he was a *tīrthika-paṇḍita*, (cfr. *ekadaṇḍo 'bhūt* of our text and preceding note) and mention of Ratnākaraśānti, Naro, etc., is made.

[5] This *prakaraṇa* is perhaps that alluded to by TARANATHA, *Geschichte* p. 241, viz, the "Vajrayānakoṭidvayāpoha" CORDIER, III, p 82,

[6] Therefore the identity of Dāmodara, Maitrīgupta and Advayavajra is fully stated and it is supported by Tibetan tradition Even in the bsTan agyur he is said to have been the pupil of Sábara CORDIER *Cat.*, II, p. 45, n. 35, and he is indifferently called Advayavajra, Avadhūtipāda, Maitrī.

[7] By the Siddha Nāgārjuna. it has been edited, as known, by L. De La Vallée Poussin. Louvain. 1896.

[8] Khasarpana is the residence of Avalokideśvara, cfr. TĀRĀNĀTHA. *Geschichte*, p 144.

[9] It must be च.

पुनरपि स्वप्ने गदितं "गच्छ त्वं कुलपुत्र दक्षिणापथे मनोभङ्गचित्तविश्रामौ पर्वतौ[1] तत्र शबरेश्वरस्तिष्ठति। स च तवानुग्राहको भविष्यतीति। तत्र च मार्गे सागरनाम्ना मिलिष्यति[2]। स च राढदेशवासिराजपुत्रस्तेनापि सार्धं गच्छ"। पश्चाद्गते सति सागरेण मिलितः। उड्रदेशपर्यन्तेन मनोभङ्गचित्तविश्रामयोर्वार्तां न श्रुतवान्। श्रीधान्यं गत्वा वर्षमेकं स्थितः। पश्चात्स्थापुच्य उड्रदेशे साधिष्ठानतारां साधयितुमारब्धवान्। मासैनैकेन स्वप्नो ऽभूत् "गच्छ त्वं कुलपुत्र वायव्यां दिशि पर्वतौ तिष्ठन्तौ[3]। पञ्चदशदिनेन प्राप्य[२-१]ते"। भट्टारिकाया 'वाक्येन वायव्यां दिशं संघातैः सार्धं गच्छति प्राप्तिपर्यन्तं पुनमेवैकेनोक्तम्। "परदिनं [4]मनभङ्गचित्तविश्रामौ प्रापयेते त्वमौ। तत्र सुखेन वास्तव्यम्"। इति श्रुत्वा पण्डितपादो हृष्टोऽभूत्। अपरदिनं प्राप्तम्। तत्र पर्वते दिने दिने दश दश मण्डलानि कृतवान्। कन्दमूलफलाहारं कृत्वा दिनदशपर्यन्तं शिलातले पर्यङ्कमारुह्य एकाग्रचित्तेन उपवासं कर्तुमारब्धः। सप्तमे दिवसे स्वप्नदर्शनं भवति। दशमे दिवसे ग्रीवां छेत्तुमारब्धः। तत्क्षणात्साक्षाद्दर्शनं भवति सेकं द[6]दाति। अद्वयवज्रोऽभूत्। पश्चात्क्रमे चतुर्मुद्रादिव्याख्यानं कृतं द्वादशदिनपर्यन्तम्। पुनरप्युपदेशेन पश्चादिनं यावत्, सर्वधर्मदृष्टान्तेन वीणां वादयदि ॥ तत्र पद्मावली। ज्ञानावली। शबरेश्वरेण आज्ञां दत्वा "प्राणातिपातादिमायां दर्शय त्वम्"। तदनन्तरं सागरः कायव्यूहं दर्शयति[7]। पण्डितपादेनोक्तः। भगवन्निममप्यहं का[२-२]यव्यूहं

---

[1] Manobhanga is referred to also in TĀRANĀTHA. *Gesch.*, p. 148. But in bKa' bab bdun ldan the residence of Śabara is said have been Śrīparvata. Anyhow all those places were near *Śrīdhānyakaṭaka* the great importance of which is attested by literary documents (YUEN CHWANG in WATTERS, *Travels*, II, 214 ff. *Mañjuśrīmūlakalpa* p. 88., etc.) and archæological and epigraphic documents (cfr *Annual Report of South India Epigraphy* 1924, 1926, 1927, *Nalinaksha Dutt* in IHQ., V, p. 794). The dual which we find in our text may quite well refer to the two mountains Pūrvaśaila and Aparaśaila which are there p. 24.

[2] MSS. चलि. Same story in bKa' bab bdun ldan, p 24.

[3] Sic. MSS. [4] Tārā. [5] MSS. Paramadimamana.

[6] On *seka*, see HARAPRASĀDA SĀSTRI, *Advayavajrasaṅgraha* Introd.

[7] MSS. varṣayate.

निर्मथितुमशक्तः। शबरेश्वर आह। "विकल्पसंभूतत्वात्"। पण्डित आह। "तर्हि किं कर्तव्यं मम ज्ञापयन्तु पादाः"॥ शबरिपा[1] आह। "तवेह जन्मनि सिद्धिर्नास्ति देशप्रकाशनाः कुरु"॥ अद्वयवज्र आह। "अशक्तोऽहं भगवन्कर्तुं कथं करिष्याम्यहम्"॥ आह। "इह वज्रयोगिनि-उपदेशात्करिष्यसि त्वम्। फलञ्च फलिष्यतीति"। इत्योपदेशमित्युक्ता भट्टारकपादोऽन्तर्धानो ऽभूत्॥

नेदं धनुर्न च मृगो न वराहपोतः
संपूर्णचन्द्रवदना च न सुन्दरीयम्।
निर्माणनिर्मिततयार्थिजनस्य हेतोः
सन्तिष्ठते गिरितले शबराधिराजः[2]॥

यथाश्रुतक्रमः समाप्तः॥

(VII)

अमनसिकारे॥ पूर्ववदकारादिचक्रं [3]संपूज्य विहितभगवतीयोगः प्रणवपीठादागतवदनः कायशुपाटाद्बहिर्गत्वा कृतपञ्चमशुक्लो दत्तदक्षिणः प्रणवपीठागतवदन उपायचक्रं लिखित्वा ततः प्रवेश्य नौमांकितशिर[4]क्ष[१-२]हृदि चक्रं संस्कार्य वज्रेण वज्रं दत्वा तद्धृदि ध्यानमुखमापूर्य वक्ष्यताऽश्लोत्तरशतमभिमन्त्रितं ज्ञात्वा "सुहे सुहं देह मेश"[5]। तत उपायचक्रमिति क्रमन्तं विचिन्त्य मन्त्रितपुष्पताडनं डमरुं घण्टां वा संवाद्य साटोपमन्त्र[6]मुच्चारयन् धूपं दद्यात्। यदि तस्य चकम्पादिनिमित्तमुपजायते तदैव कथनीयमन्यथा नैव। तदनु चक्रादुद्धृत्य मन्त्रदानं गुरुपरंपराकथनं कर्तव्यमिति॥

सम्प्रदायविधिः॥

---

1 MSS. शबराधिप.

2 Metre: Vasantatilaka.

3 Here we have the description of the *dīkṣā*.

4 MSS. सन्नमुन्नमुच.

5 Mukhe Mukham dehi, me . . .

6 Sic.

(VIII)

एतदभिसन्धाय गुरुपर्वक्रमाम्नायसम्प्रदायैकघाचटमिति ।[1] तत्कथा च कथितव्या अज्ञोत्पादनार्थी । ग्रिब्धघाणाङ्कीरभिधीयते । इच जन्मनि यदि न सिध्यति तदा मरणसमये चक्षं तन्मुखात्तन्मुखे प्रविश्य सस्थान एव जीवनम् । इति लूयीपादादेशात्संवरार्थंवतन्त्रमार्गेतुमोत्तु-षाणं गतः ।[2] तत्र योगिनीपार्श्वे दिनचतुष्टयं यावत् स्थितो चौर्येण तत्तन्त्र-मानीतं नदीपारे तथा दृष्टं एतत्साधनं सर्वमपि वायुना नीतं वज्राङ्गना-सकाशे । कुकुरीपादैः अतमिन्द्रभूतिपादैर्जालन्धरविरूपापादैः पैद्धपातिक-विङ्कुरपैद्धपातिकाः ॥

(IX)

नमः श्रीवज्रयोगिन्यै ॥

प्रथमं यथासम्भवं पूजोपकरणं कुर्यात् । अग्रे बलिं स्थाप्य वामे मद्यपात्रं पञ्चपीयूषसंयुक्तम् । वामकरे चन्द्रः । दक्षिणकरे सूर्यः । कुम्भकेनादेन नासापुटेन निस्सार्य करे विलीय करशोधनम् । तत्करे मद्यपात्रं पिधाय मन्त्रस्नानं पूजाद्रव्यस्य प्रोक्षयेत् ॥ मण्डलीकरणस्य त्रिकोणाकारेण मध्ये वं । उपरे यथाविधिशोधितदिव्योदकसमायुक्तसिन्दूरपूजा । अभावे पुष्पा-दिभिर्बीजपूजा । तदनन्तरं त्रिविशुद्धिमनुस्मरेत् । आत्मानं त्रैधातुक-विशुद्धिकूटागारं विचिन्तयेत् झटिति नाभिमण्डले भगवतीं भावयेत् ॥ मुद्राद्वययोगणो वाग्जपः । तदनन्तरमग्रे निस्सार्य पूजा स्तुतिरमृतास्वाद-नम् । सर्वभौतिकादिकपालेभ्यः शेषामृतक्षैकं भगवती संहार्यैत्याम्नायः ॥

## VII

### THE LĀMĀKRAMA AND THE INFLUENCE OF TIBETAN-SPEAKING RACES ON THE TANTRAS

In many Tibetan translations of Buddhist Tantras one comes across the expression: *lhamoi rim pa*.

In such cases, one feels attempted to translate expressions of this kind by: *devīkrama*. It is, in fact, known that *lhamo* is equivalent to *devī*. But if we have recourse to the Sanskrit original of the tantric texts connected with the cult of the Ḍākinīs and Yoginīs we shall realize that such a re-translation of the Tibetan term would not be exact.

---

[1] corr. arthinī ?   [2] Subject ?

In the Ḍākārṇavatantra there is mention of the *lāmācakra*[1]. In the Abhisamayamañjarī by Śāntirakṣita[2] we read mantras as the following; *oṃ ḍākinīye hūṃ hūṃ phaṭ oṃ lāme huṃ phaṭ lāmāyā.*

Then, in a commentary upon the Lakṣābhidhānatantra, the colophon of which runs thus: *Lakṣābhidhānād uddhṛtalaghvabhidhāne piṇḍārthavivaraṇanāmaprathamatikāparicchedа*, when the various *pīthas*, localised in the body, are described, we read (f 7, b): *ātmapīthe vajraḍākinī dakṣiṇadale kaṇṭhapadme parapīthe lāmā paścimadale nābhipadme mantrapīthe khaṇḍarohā.*

The same name is to be found among the varieties of the *sthalacaraḍākinīs: śvānī, lāmā, aśvī, khaṇḍarohā, hastinī, rupiṇī, pracaṇḍā gauḥ, meṣī, caṇḍākṣī*, etc., (all are manifestations of Vajravārahī) and in the section dedicated to the *khecaraparivartinyah; vajraḍākinī, cāṭakī, lāmā, śukī. khaṇḍarohā, sārikā, rūpiṇī, kokilā, pracaṇḍā, lāvī, caṇḍākṣī, pārāvatī* (8,a). Mention of this *lāmā* is made in very many other places, of the same commentary

In Cakrasaṃvarapañjikā by Jayabhadra (p. 26. a) we have *kākāsyādyā lāmāntāiti* (*ntā* doubtful), *lāmājātīyāḥ* (i e.. yoginyaḥ).

So that there is no doubt as regards the original form: *lāmā* common to many Buddhist Tantras connected with the cult of the Ḍākinīs and Yoginīs. It is quite easy to trace out the origin of this word: it is nothing else than the Tibetan *Lhamo*, she-devil. The Tibetan mythology is full, as it is known, of these female goddesses haunting mountains, passes, rivers, etc., and to be always propitiated. They existed before Buddhism, and, then, were introduced into it.[3] But the mention in these Tantras of the Lāmā worship deserves our special notice, because it shows another channel of influence of foreign culture upon that complex and manifold literature which is represented by the Tantras. The northern borderland with its Tibetan-speaking races has evidently exercised some influence upon the development of these currents of thought and mystical practices, which are chiefly of popular origin though elaborated later on by the pandits and teachers of the various sects and freely accepted by the Buddhist or Hindu society. This mention of the *lāmācāra* supports, therefore, the statements of the Buddhist as well as brahminical traditions, when

---

[1] HARAPRASĀDA ŚĀSTRĪ, *Catal. of Sanskrit Manuscripts of Asiatic Society of Bengal.* I (Buddhist manuscripts) p. 94. l. 20

[2] Some few leaves only of this work are preserved in the collection of His Honour the General Kesar Sham Sher Jung Bahadur Rana The reference is very important because it gives a *terminus a quo* the existence of the Lāmā-worship was known in India

[3] This belief in witches is also to be found all over the borderland of Tibet. For Dardistan cfr. LEITNER, *Dardistan.* London, 1893. p. 23.

they speak of Mahācīna[1] as the country of origin of some tantric worships. It was there that the Siddha Nāgārjuna went and was initiated into the cult of Ekajaṭā.[2] It was also there that Vasiṣṭha went in order to get *siddhi* from Tārā. This statement finds full support in the Ḍākārṇavatantra where in the fourth *Paṭala* dedicated to Lāmā we find the north designated as the place of the *lāmās*: *Lāmottarakulotpattiyoginī yūthanāyikā.* We cannot, however, better specify the character of these *Lāmās*; besides being goddesses they must have been witches, like the *ḍākinīs* and the *yoginīs* with whom they are connected. In fact, in the commentary upon the Lakṣābhidhānatantra, already referred to, they are included among the ḍākinīs who are always considered as flying goddesses and whose name is, in the Tantras, related to the root: *ḍai* to fly, just as very often their special abode is said to be Uḍḍiyāna, a name connected in the Tantras with the same root: *ḍākinyas....: ākāśacarāḥ; ḍai vaihāyasā gamana-iti dhātupāṭhāt*[3] It it is not impossible, *a priori*, that flying witches were called after a root denoting their peculiar quality, it is also legitimate to suppose that we have, in this case one learned etymology of some foreign or at least vernacular[4] name. There can hardly be any doubt that these ḍākinīs, yoginīs, lāmās, etc., were originally nothing else than local female godlings or goblins such as almost each village or town possessed and who were, later on, considered as manifestations or particular aspects of the most prominent female deities of India, viz., Durgā, Kālī, etc.[5] In the commentary upon the Lakṣābhidhānatantra (fol. 4, a) they are said to be: *sarvasattvāpakāriṇyo grāmadaivatyaḥ pīṭhopapīṭhāśritāḥ.* In fact, in the list of these ḍākinīs, as they are given in our texts, we recognize quite well, from their own names, the popular and primitive character of many of them. They are in the form of animals, birds, or monsters with the body of

---

[1] The existence of such tradition is clearly indicated by some Tantras which in their title itself show a connection with the *Mahācinasampradāya.* I quote for instance the : *Mahācinakrama.*
On Mahācina cfr. S Levi—Befeo. 1905.

[2] One *Sādhana* edited by Doctor Benoytosh Bhaṭṭācārya and referred to in his learned introduction to the edition of Sādhanamālā has the following colophon: *āryanāgārjunapadair bhoṭeṣūddhṛtam* Vol I, p. 267. For the legend connected with Vasiṣṭha cf. *Rudrayāmala* p. 149..

[3] *Lakṣābhidhānatantraṭīkā* fol IV, 1 cfr. also *Cakrasaṃvara* fol. 2, b *ḍākinya ākāśagaminyaḥ. Vaihāyasyām gatau ḍiyanta ityartha.* The Tibetans follow this etymology in so far as, beside the form Ḍākinī, Ḍākimā, they use for this term the translation mk'a'ḥgro ma, *ākāśa gamini*-i

[4] But cfr. Bengali: *ḍākā*, to call. In Bengal, the Ḍākinis are still surviving in popular beliefs.

[5] This has been shown in detail by me in my forthcoming volume on the Durgāpūjā.

women and the head of some animal, and in general, their terrific aspect is predominant; they are, as we saw, *sarvasattvāpakāriṇyaḥ*. They can stay on earth, in the sky, in water. But at the same time their acceptance into the Tantras sheds a lot of light upon the various elements of which these texts were the outcome and their interpretation also by the Tantric teachers becomes extremely interesting, when we want to establish how these popular and somewhat primitive and crude beliefs were modified in a literature which represents the most powerful attempt at synchretism that we know. Taken from the low classes or from the borderland of India, from the villages and the peasants, and perhaps, from settlements of foreigners, they were adapted with their original names to the ritualism and to the mysticism even of the new schools. So the Tantras could claim to be strictly connected with popular beliefs and at the same time rise to a higher and more spiritual refinement. In the lower strata, these ḍākinīs, lāmās, yoginīs continued to receive their worship; in the debased Tantras concerned chiefly with the 6 *karmas*, meant to bestow worldly profit upon the sadhaka, these remained with their name, but designated the letters of the alphabet, *bīja*, in the design of magic circle, *maṇḍala* or *cakra*; in a higher plane, that is in the *adhyātmapūjā*, they correspond to the arteries and veins, *nāḍī*, circulating in the body and the control of which is necessary during the prāṇāyāma according to the Haṭhayoga system considered as a most important element during the process of meditation.

At an even higher stage of symbolism, they represent, in the esoteric language of the *yogin*, the constituents of illumination, bodhipakṣas. In order to combine these contradictory elements the Buddhist tantric teachers were obliged to have recourse once more to the theory of the double truth, the relative and the absolute, *neyārtha* and *nītārtha* which plays such a great part in Mahāyāna: *lokasamvṛtyā ḍākinīcakrasamvaro laukikasiddhisādhanīya iti. Nītārthena ḍākinīsamvara iti. ḍākinya iti saptatriṃśad bodhipākṣikadharmāḥ; teṣāṃ cakram samūho dharmakāyalakṣaṇaḥ śūnyatāe. tasya svabhāvikakāyena nirālambakaruṇātmakena saha samvaram ekatvam. atra ca karuṇā candro bodhicittam pañcaviṃśatiśaśipadalakṣaṇaṃ mahāsukham nirāvaraṇam; sūryo dvādaśaśūnyatātmaka iti. tena saha saṃvaro ḍākinīcakrasaṃvaras; taṃ vakṣye aham....*

## APPENDIX

### List of the Ḍākinīs according to the Lakṣābhidhānatantraṭīkā[1]

*sthalacarajalacaravanacararūpaparivartinyah ḍākinyaḥ*

cakraḍākinī
śvānī
lāmā
áśvī
khaṇḍarohā
hastinī
rūpiṇī
gau
pracaṇḍā
mesī
caṇḍākṣī
ajī
prabhavatī
harinī
mahanasā
kharī
vīramatī
sūkarī
kharvarī
viḍālī
cakravega
kumbhinī
khaṇḍarohā
kapardikā
śauṇḍinī
karkaṭī
cakravarminī
matsī
suvīrā
makarī
mahābala
darḍurī
cakravartinī
yamamathinī
kṛtalasī

daṃṣṭrī
lankeśvarī
araṇyaśvānī
drumachāyā
araṇyasiṃhinī
airavatī
gaṇḍī
bhairavī
vyāghrī
vāyuvega
ṛkṣī
surābhakṣī
nakulī
syāmā devī
camarī
subhadrā
jambukī
hayakarnā
khagānanā
kūrmī
mahāvīryā
śankhinī
kākasyā
ulūkāsyā
godhī
mūṣakī
śvanāsyā
śālijātakī
sūkarāsyā
vanarī
yamadāḍī
gavalī
yamadūtī
sallakī
yamadaṃṣṭrinī

*khecara rūpaparivartinyah* [*ḍākinyaḥ*]

lāmā
śukī
khaṇḍarohā
sārikā
rūpinī
kokilā
pracaṇḍā
lāvī
caṇḍākṣī

pāravatī
prabhavatī
bakī
mahānāsā
cataki
viramatī
cakravākī
kharvarī
hamsī

---

[1] To many of them special *chapters* are dedicated in the *Ḍākārṇava-tantra*

laṅkeśvarī
yāñcī
drumacchāya
vṛkṣāriṇī
kokilākṣī
śauṇḍinī
rajakī
cakravarṇinī
bhagavatī
suvīrā
tittirī
mahābalā
sārasī
cakravartinī
jalakākī
mahāvīryā
balākā
kākāsyā
nīlākṣī
airavatī
kākī
bhairavī
gṛdhrī
vāyuvegā
ghukī
surābhakṣī
mṛgāriṇī
syamā devī
śikhinī
subhadrā
kukkuṭī
hayakarṇā
bhedinī
khagānanā
cakravegā
kruñcī
khaṇḍarohā
ulūkāsyā
cakorī
svanasyā
anilā
sūkarasyā
vagdhulikā
yamadāḍī
bukkī
yamadūtī
tittibhī
yamadaṃṣṭriṇī
bhoruṇḍī
yamamathanī
ambarakī

## Development of the Ṛtusaṁhāra Theme in the Rāmāyaṇa.

By C. W. GURNER.

It is the object of the following notes to call attention to two passages in the Kiskindhakaṇda of the Rāmāyana which are of importance both as early examples of Kāvya writing, and in their bearing on the conventional literature of the Seasons in Sanskrit. These are the set pieces on "The Rains" in the twenty-eighth Sarga and on "Autumn" in the thirtieth Sarga. There is nothing else quite like them, as a sustained piece of Kāvya writing, in the Rāmayaṇa; and I will lay down three postulates about them, the last of which alone seems open to any kind of question. These passages are an insertion representing a later stratum of literature than the original epic, they are the work of the same hand, or at least of the same school, and finally they have their place in the development of Kāvya between the Rāmāyaṇa as an Ādikāvya and the classical Sanskrit period of Kālidāsa.

Without attempting the rather sterile task of picking out the exact junctures of supposed insertions in the Rāmāyana let me resume briefly the context in which these two Rituvarnanas are found The twenty-sixth Sarga describes the coronation of Sugrīva after the defeat of Bali. In the twenty-seventh Rāma retires to Mt. Prasravana, and the opportunity is taken for a descriptive passage on mountain scenery ending with the despair of Rāma and his encouragement by Lakṣmana. The Sarga ends with a few lines by Rama, of importance for our purposes, beginning.

प्रत्याशं प्रतीक्षिष्ये स्थितोऽस्मि वचने तव ।
सुग्रीवस्य नदीनां च प्रसादमनुपालयन् ॥

R, IV, XXVII, 44

Sarga twenty-eight then eads loff with the line.

स तदा वालिनं हत्वा सुग्रीवमभिषिच्य च ।
वसन्माल्यवतः पृष्ठे रामो लक्ष्मणमब्रवीत् ॥

R, IV, XXVIII, 1

Perhaps most readers will feel something a little unexpected about it, a certain insouciance as to the scene imme-

diately preceding. This is followed immediately by the description in Rāma's mouth of the Rains, the first of my two set pieces Lines 2 to 14 are in Śloka. Then comes a long homogeneous passage in Upajāti metre (*l*. 15 to 50). There follow three more descriptive lines in Śloka, and with the neatest possible transition we are back to Rāma's despair in waiting And not only are we back to the same theme, but in the same words

तस्मात्कालप्रतीक्षोऽहं स्थितोऽस्मि शुभलक्षण ।
सुग्रीवस्य नदीनां च प्रसादमभिकाङ्क्षयन् ॥

R, IV, XXVIII, 63,

the three concluding lines of the Sarga being a word for word repetition of the three lines following the same phrase in Sarga twenty-seven.

At the opening of Sarga twenty-nine the scene is shifted to Kiskindha, where we see Sugrīva as the picture of a dissolute monarch on whom Hanumān urges sound advice about duties to a superior ally with pre-existing obligations. In matter and language the whole passage is thoroughly characteristic of the genuine Rāmāyana epic

In the thirtieth Sarga we return again to Rāma; and its opening describes in the simplest language his distress at the sight of autumn in the absence of Sītā, while Sugrīva delays

कामवृत्तं च सुग्रीवं नष्टां च जनकात्मजाम् ।
दृष्ट्वा कालमतीतं च मुमोह परमातुरः ॥

R, IV, XXX, 3.

His thoughts shift to the distress which autumn will provoke in Sītā in her hour of separation.

R, IV XXX, 8.

पुष्पितांश्चासनान् दृष्ट्वा काञ्चनानिव निर्मलान् ।
कथं स रमते बाला पश्यन्ती मामपश्यती ॥

R, IV, XXX, 8.

This phase ends in line 12, immediately after which Laksmana, meeting Rāma, offers further encouragement, this time in Upajāti metre On this follows in Rāma's mouth the second set-piece, that on Autumn, still taking off from thoughts of Sītā.

अथ पद्मपलाशाक्षीं मैथिलीमनुचिन्तयन् ।
उवाच लक्ष्मणं रामो ॥

R. IV, XXX, 21.

Up to line 27 this Ṛituvarnana proceeds in Sloka, describing in fact not the new season but the cessation of the rains. With the following line there begins a long passage in Upajāti metre on autumn (ll. 23-57), which is in every way parallel to that on the rains except for the insertion of one remarkable Śloka. After this passage there follow six ślokas, still descriptive of autumn but of a much simpler character, then a couple of lines recalling the motif of separation from Sītā, and with the same facility of transition we are back to a characteristic epic strain on the ingratitude of Sugrīva followed by threats. It is particularly significant that the unusually detailed summary of this passage in the index in R, I, III, which is linked up with it in fact by the peculiar word वर्षरात्रं (cp. IV, xxx. 1.) gives no hint of the existence of these two Ṛituvarnanas

ताराविलापं समयं वर्षरात्रिनिवासनम् ।

कोपं राघवसिंहस्य बलानामुपसंग्रहम् ॥

R, I, III. 24

Quite apart from style and diction the peculiar tangle of motifs in the passage summarised indicates a later insertion. *Prima facie* one would be disposed to regard the inserted Ṛituvarnana as coinciding with the two passages in Upajāti metre. Notice particularly how the six ślokas following the Upajāti passage in the thirtieth Sarga are of a cruder and simpler style than those preceding them. Such a line as

असनाः सप्तपर्णाश्च कोविदाराश्च पुष्पिताः ।

दृश्यन्ते बन्धुजीवाश्च श्यामाश्च गिरिसानुषु ॥

R. IV, XXX 62.

abandons all the beauty of the long descriptive passage for what may be called the "catalogue method" of nature painting, the enumeration of bare lists of trees or flowers, which is so characteristic of the archaic epic and appears for instance in the description of Mt Prasravana (*e.g.* XXVII, 17). But I do not feel sure that the whole of the Śloka passages in the twenty-eighth and thirtieth Sargas lie outside the later material. I shall probably carry most readers with me if I maintain that Sarga 28 as a whole between the lines repeated verbatim, and Sarga 30 as a whole between the first and the second passage on Sītā in separation mark the outer limits of the later Kāvya element. That this later Kāvya element does exist in these two Ṛituvarnanas I must now establish.

Let us turn at this point to an earlier Ṛituvarnana in the Rāmāyaṇa, which, if any such passages do, must belong to the

original epic strătum. This is the description of the Hemanta season in the sixteenth Sarga of the Araṇyakanda.

R, III, XVI, 1-26.

शरद्व्यपाये हेमन्तऋतुरिष्ट प्रवर्त्तत

And in passing one may note the implications of the bare half line. A writer archaic enough to drop the augment is already thinking of the six seasons in their conventional ordered succession ; for हेमन्त is not the word he would have used of the cold weather were there not शिशिरः to follow And how does he treat the description ? In a series of short simple sentences, pleasant to the ear, but devoid of any complicated euphony, he picks out the leading natural features of the season, mildness of the sun and fogginess of the nights, the activities of priest, monarch, and peasant, rice-fields at the point of ripeness, elephants shrinking from the cold water, rivers half hidden in the mist, and withered lotus beds. There are a few very simple similes, and an occasional neat little effort in the manipulation of words

दिवसाः सुभगादित्याश्छायासलिलदुर्भगाः

*Ibid* . 10.

The rhythm is that of polished śloka verse. but in rather an elementary stage.

If one reads the two later Ṛtuvarnanas in comparison with this passage one is conscious at once of being in a different world of poetry, albeit evolved from the same elements. The steady run of short simple sentences has disappeared. Here is a writer who rounds off each natural feature in an elaborately constructed couplet, and heightens the effect by interspersing among these couplets a series of staccato clauses or piled up verbs and nouns

विचरन्ति महीपाला यात्रार्थं विजिगीषवः

*Ibid.*, 7,

writes the earlier hand.

रजः प्रशान्तं सहिमोऽद्य वायुर्निदाघदोषप्रसराः प्रशान्ताः

स्थिता हि यात्रा वसुधाधिपानाम्

R. IV, XXVIII, 15,

writes the latter, or

सूर्यातपक्रामणनष्टपङ्का भूमिश्चिरोद्घाटितसान्द्ररेणुः ।

अन्योन्यवैरेण समायुतानामुद्योगकालोऽद्य नराधिपानाम् ॥

*Ibid.*, XXX, 37.

The verse is compactly built up in one grammatical and harmonious unit, in a manner unknown to the earlier passage.

But what characterises these two later Ṛituvarṇanas above all is a new power of constructive imagination in the poet. One hesitates to apply the conventional terms Alaṅkara, the meaning of which varies so much in different authorities as to confuse rather than to assist. But, if we take the essence of Dandin's Utprekṣa to be in the novelty of interpretation of an observed object through the imaginative faculty

अन्यथैव स्थिता वृत्तिश्चेतनस्येतरस्य च ।
अन्यथोत्प्रेक्ष्यते यत्र

Kávyad. II, 221,

this figure dominates the two Sargas in the Kiskindhakaṇḍa. The conception of nature's concert (R, IV, XXVIII, 36) of the peacocks as dancing girls (*Ib.*, 37) of the sky roaring in pain (*Ib.*, 11) of autumn imparting her glory to trees and flowers (XXX, 28) of the cranes as a wreath in the sky, such may be singled out as instances of the powerful imaginative faculty which distinguishes the new poet from the old It finds its fullest expression in the personification of nature in the terms of femininity, to which I shall recur later on.

The boundary line between Utprekṣa and Upamā is often almost imperceptible to the Western critic, and the same imaginative faculty underlies the comparison of the clouds to war elephants (XXVIII. 20 and 31) and of the lake at night to the night sky.

सुप्तैकहंसं कुमुदैरुपेतं महाह्रदस्थं सलिलं विभाति ।
घनैर्विमुक्तं निशि पूर्णचन्द्रं तारागणाकीर्णमिवान्तरिक्षं ॥

*Ibid.*, XXX. 48.

Along with this imaginative element goes an intensity of descriptive power, which, if not in the same degree a new factor in poetry, does distinguish the new writer from the old. It runs alike through the similes and through passages of nature-painting to be classed, probably, as Svabhabokti, such as the description of the snakes

अनेकवर्णाः सुविनष्टकाया नवोदितेष्वम्बुधरेषु नष्टाः ।
क्षुधार्दिता घोरविषाबिलेभ्यश्चिरोषिता विप्रसरन्ति सर्पाः ॥

*Ibid.*, 44.

On the other hand this writer, who is obviously a great creative poet, and who, if my analysis is accepted at all, is taking the art of Kāvya-writing a stage beyond the Ādikāvya

of the original epic, makes very little use of what subsequently became its most distinctive feature, slesha or double-meaning. It occurs in a very simple form in one or two similes. *e g*, the

तडित्पताकाभिरलङ्कृतानाम्

*Ibid*, XXVIII, 31,

of the clouds and war elephants, and the शशाङ्कोदितसौम्यवक्त्रा of the lady night (XXX, 46). But generally speaking one may say that there is no striving after double-meanings in passages in which it would be regarded as a *sine qua non* by the later Kâvya writers. Even when the conventional Kama appears on the scene, it is by no means easy to make the familiar बाणासन bear the meaning of a bow as well as the two flowers

प्रफुल्लबाणासनचित्रितेषु वनेषु

*Ibid*. XXX, 56.

and it seems just possible that the poet was thinking only of the flowers.

Similarly there is not a great deal of the conventional Śabdālaṅkaras in these two Sargas, though perceptibly more than in the standard epic style But all the while the writer is experimenting with words, trying new effects The Yamaka of course is among them He amuses himself with the manipulation of इन्द्र in two lines in Sarga 28 for which simpler parallels might be found in the oldest stratum, but probably nothing of the same complexity

मत्ता गजेन्द्रा मुदिता गवेन्द्रा वनेषु विक्रान्ततरा मृगेन्द्राः ।
रम्या नगेन्द्रा निभृता नरेन्द्रा प्रक्रीडितो वारिधरैः सुरेन्द्रः ॥

*Ibid*. XXVIII, 43, cp. 46

There is an elementary yamaka in

गृहीत चापोद्यतदण्डचण्डः प्रचण्डचण्डोद्य वनेषु कामः

*Ibid*, XXX 56.

Or again he plays off adjective and noun.

शैलेषु शैला नववारिपूर्णा मेघेषु मेघा

*Ibid*, XXVIII 40.

or piles up verb and noun with distributive dependence

वहन्ति वर्षन्ति ........ नद्यो घना etc

*Ibid*. 27.

or repeats the same verb, in the figure of verbal Avritti,

निद्रा शनैर्केशवमभ्युपैति द्रुतं नदीसागरमभ्युपैति etc

*Ibid.*, 25,

or slips in the repeated gerund in both Sargas, as a small indication of identity of authorship.

विश्रम्य विश्रम्य Ibs. 22 विक्षोभ्य विक्षोभ्य

XXX, 41.

All these verbal ornaments, it may be noticed, are reproduced in the Sanskrit writings of Aśvaghoṣa, the only professed Kāvya writing we know of between the Rāmāyaṇa and Kālidāsa; and it is significant that there should be so much resemblance between that writer and the poet of these two Sargas. Whether or not they must have been known to Aśvaghoṣa is a question to be avoided in this article

One theme of particular interest in these descriptions of Autumn and the Rains is the interpretation of Nature in the terms of passion, the infusion of Śṛṅgāra Rasa In fully developed Kāvya this is the dominating feature in all descriptions of nature and of the seasons It is expressed throughout in the Ṛtusaṁhāra of Kālidāsa, in which the seasons tail off one by one into purely erotic writing. In this earlier strand of Kāvya in the Rāmāyana one can trace the obsession at an earlier stage.

If we return for a moment to the Hemanta of the Aranyakānda Sarga 16, we find ourselves back beyond this phase of thought altogether The writer of that passage is interested in Nature for its own sake, without its erotic implications. To be sure, even this early poet does not contemplate Nature without some shade of feminine association in his mind

विश्वौनिःश्वासान्धेव स्त्री नोत्तरा दिक्प्रकाशते

R. III. XVI, 8.

But this chaste and straightforward simile represents the limit of his interest in the theme. Notice how much he misses that later Kāvya would have leapt at. He touches on the activities of the three castes प्राज्यकामा जनपदा etc. III, XVI, 6 but *not* what the women do. Contrast the Hemanta of Kālidāsa. He thinks of the long cold nights नीहारतरायामासियामा.

*Ibid.*, 12,

but not of company or absence which makes them shorter or longer. Contrast Bhartrihari's imitation तैस्वायायामा etc.

Bhart. Śringāraś, II, 98.

If, as I am inclined to believe, the concluding ślokas of the Autumn in the Kiśkindhakaṇḍa (XXX, 28-30) survive from the earlier hand, the contrast would need qualification. But taking the Hemanta as it stands one finds in it the nature poetry of a mentality untouched by the Śṛingāra Rasa, devoid of erotic obsession.

In the two Sargas of the Kiśkindhakaṇḍa one is conscious at once of a change of mentality. Śṛingāra Rasa, the erotic tone, is making itself felt. Not, to be sure, in the same degree as in the later Kāvya It is far from being the writer's sole or dominant interest in the description of nature. But the thought runs at the back of his mind

This Śṛingāra Rasa, in the conventional nature painting of Kāvya, poetry finds expression in four aspects, namely, in allusion to the passions of the animal world, in the personification of nature in terms of femininity, in the thought of lovers' purposes served by the seasons, and in the erotic associations, such as the thought of meeting or of the loved one's countenance, which natural objects excite. All are to be found, in a comparatively unobtrusive form, and still as a matter of subsidiary rather than of primary interest in "The Rains" and "The Autumn" of the Rāmāyana

Why, for instance, should almost every mention of the birds of the air and the beasts of the field have some shade of erotic colouring? The writer can hardly think of cattle, elephants, bees, and above all peacocks without slipping in just the one word which defines the thought While occasionally it breaks out from its subsidiary position and becomes the primary interest in the animal world

स मन्मथा तीव्रतरानुरागा कुलान्विता मन्दगतिः करेणुः

R, XXX, 39.

The personification of nature in terms of womanhood is a large subject, to which I alluded when mentioning the imaginative power of this writer. A simple instance is the personification of rivers, not exactly as nymphs, but as women in love; and it was quite probably a stock theme even before this writer worked it up.

मीनोपसंदर्शितमेखलानां नदीवधूनाम्

*Ibid.*, 54.

There is far greater individuality and imaginative power in the bold Utprekṣa pictures of the intoxicated woods, and of the peacocks as dancing girls (*Ibid.*, xxxviii and xxviii, 37). Or again this personification covers a still wider field in the womanhood of Evening and Night portrayed in two conse-

cutive lines (xxx, 44, 45). The former of these is the stray Śloka embedded in the Upajāti context; and the remarkable beauty and finish of its expression, no less than the metrical anomaly, make inevitable the query whether it is not the insertion of a still later Kāvya poet.

चञ्चच्चन्द्रकरस्पर्शहर्षोन्मीलिततारका ।
अहो रागवती संध्या जहातु स्वयमम्बरम् ॥

*Ibid.*, 45.

The utility of the Seasons for lovers' purposes leads away from the primary interest in nature itself, which still marks this early Ṛituvarṇana, and the thought occurs only in an elementary stage.

इमास्ता मन्मथवतां हिताः प्रतिहता दिशः

R, XXVIII. 13.

Particularly instructive is the contrast between this rather vague idea and the clearly-cut convention of the Abhisarika amid lightning and clouds, which had presumably not taken shape at the time of this early writer. Similarly under the head of erotic associations one may instance the line on Meetings (so reminiscent of a poem of Shelley's),

निद्रा शनैः केशवमभ्युपैति द्रुतं नदीसागरमभ्युपैति ।
हृष्टा बलाका घनमभ्युपैति कान्ता सकामा प्रियमभ्युपैति ॥

R, XXX, 25,

"and the rivers kiss the sea."

Before leaving the element of Śṛingāra Rasa one may mention too the introduction of the personified Kama with his bow. It is noticeable as an early instance of the specific convention कामस्य मूर्तत्वम् among those enumerated in Rajasekhara's Kāvyamīmansā 187 and suggests many questions about the date and genesis of this figure.

It is impossible to dwell longer in this context on the very wide subject of Śṛingāras Rasa in nature painting; but it is clear that in the poetic mentality of this writer in the Rāmāyaṇa are to be found all the elements of the later developments of the literature of the seasons.

It is hardly necessary to argue at length that the two passages on "Autumn" and "The Rains" are the work of the same hand, or at least of the same school. Instances have been taken indifferently from both, and close perusal of the two Sargas will leave most readers with a clear impression of their common authorship. Apart from the general uniformity of

style there are close parallels, almost cross referencos between one Sarga and the other (*e.g.*, xxx, 43 and xxviii. 36, xxx, 47 and xxviii, 33). The use of the word आप्यायित (xxx, 38 and xxviii, 21) is a petty point of identity

Now the intensive study of two isolated Kāvya episodes in the Rāmāyana derives interest only from their bearing on the history of Kāvya poetry. And in so specialised a subject as the Seasons the enquiry turns naturally on comparison with the Ritusamhāra of Kālidasa, that poem being the earliest classical Kāvya extant. The resemblances are so marked that only one of two conclusions is possible, either that "The Rains" and "The Autumn" of the Rāmāyana were known to and imitated by the young Kālidāsa (or whoever the author of the Ritusamhāra may have been), or that they were themselves the interpolation of a writer acquainted with that poem. I merely state this latter alternative to anticipate the objection to my postulate that the passages in the epic date between the original epic stratum and Kālidāsa. Another reader, who agrees that they are not the work of the original epic writer might consider them a comparatively insipid interpolation in the days of the later Kāvya. To my mind, the whole course of literary development in Sanskrit seems to necessitate regarding the Kāvya passages analysed above as earlier than the Ritusamhāra. At the same time the resemblances with Kālidāsa do not of course exclude the possibility of intermediate Kāvya writers between the two pieces of literature. The author of the Ritusamhāra may have been carrying on the tradition of intermediate works which have disappeared, and not be imitating direct the Seasons in the Kiṣkindhakanda. However, that may be, it is surprising to find how close the resemblances are; and they immediately bring these two passages in the Rāmāyana into relief as a definite step in the evolution of this poetry of the conventionalised seasons

Of the general personification of Nature in the Ritusamhāra nothing need be said But take so precise a detail as the red insects on the grass, which suggests to the earlier writer a woman wrapped in green cloth with red spots

बालेन्द्रगोपान्तरचित्रितेन विभाति भूमिर्नवशाद्वलेन ।

गात्रानुपृक्तेन शुकप्रभेण नारीव लाक्षोक्षितकम्बलेन ॥

R. IV, XXVIII, 24

Kālidāsa substitutes for this rather crude, if vivid simile, the more conventional jewellery, and may be thinking of fireflies rather than of red insects but in words, cadence, and idea the influence of the one passage on the other is unmistakeable.

विभाति शुक्लेतररत्नभूषिता ।
वराङ्गनेव क्षितिरिन्द्रगोपकैः ॥

Ṛitus, II, 5.

If the writer in the Kiskindhakanda dwells twice on the idea of the dancing peacocks क्वचित्प्रनृत्ता इव नीलकण्ठैः ।

XXVIII, 33,

and क्वचित्प्रनृत्तै· क्वचिदुन्नदद्भिः (*Ibid.*, 37) Kālidāsa must do the same प्रवृत्तनृत्तं कुलमद्य बर्हिणाम् and प्रवृत्तनृत्यै शिखिभिः समाकुलम् ।

Ṛitus ; II, 6, and 16.

The intoxication of the woods in line 33 quoted above is recalled, with variation of features in Ṛitus: II, 23. The stock theme of the rivers in their course to the sea is repeated by Kālidāsa with such close verbal resemblance as to make irresistible a correction of the Bombay text of the Rāmāyaṇa notwithstanding the commentator

तटानि शीर्णान्यपवाहयित्वा...
दृतं स्वभर्तारमुपोपयान्ति ।

R, IV, XXVIII, 39

But read द्रुतं for दृत and compare.

निपातयन्त्यः परितस्तटद्रुमान्
प्रयान्ति नद्यः त्वरितं पयोनिधिम् ।

Ritus, II, 7.

The personification of the rivers appears again in a still more characteristic form in the Autumn both of the epic and of Kālidāsa, though in this case the epic passage quoted may possibly be a survival from the earlier epic hand.

दर्शयन्ति शरन्नद्यः पुलिनानि शनैः शनैः ।
नवसंगमसव्रीडाजघनानीव योषितः ॥

R, XXX, 58.

नद्यो विशालपुलिनान्तनितम्बबिम्बा ।

Ṛitus, III, 3.

The personification of Night in the terms of womanhood, which is the very soul of the later Kāvya, is followed, feature by feature, in the Ṛitusaṁhāra, with a master touch of differentiation at the close. As this is the last of my quotations, and of particular importance for the purpose I would reproduce it in full.

रात्रिः शशाङ्कोदितसौम्यवक्त्रा
तारागणोन्मीलितचारुनेत्रा ।
ज्योत्स्नांशुकप्रावरणा विभाति
नारीव शुक्लांशुकसंवृताङ्गी ॥

R, XXX, 58

तारागणप्रवरभूषणमुद्वहन्ती
मेघावरोधपरिमुक्तशशाङ्कवक्त्रा ।
ज्योत्स्नादुकूलममलं रजनी दधाना
वृद्धिं प्रयात्यनुदिनं प्रमदेव बाला ॥

Ritus III 7

The closeness of resemblance in descriptive detail coupled with the step forward in poetry which winds up the stanza of Kālidāsa, makes this an admirable instance to establish both that the one poet knew the other and that Kālidāsa was the later of the two.

The discomfiture of the peacocks by the geese R IV, XXX, 40 and the association of the Sarasa with the rice-fields at the point of ripeness (*Ibid*, 47) are features of autumn reproduced by Kālidāsa, the former in Ritus, 11, 13 and the latter *Ibid*, 16 On the other hand one incident of the seasons on which the epic writer, or rather the writers in both strata of the epic, are insistent, has little interest for Kālidāsa in the Ritusaṁhāra This is their effect on roads and campaigning (R. III, XVI, 7; R, IV. XXVI, 15; *Ibid.*, XXVIII, 53; *Ibid*. XXX, 37 and 60) an aspect of autumn with which Kālidāsa is of course more concerned in his Raghuvaṁsa (Ragh. IV, 24)

The above are a series of parallels all of which would fall within the scope of imitation in language or idea, Sabdarthaharana, as defined by Rājaśekhara. It is perhaps worth while noting a few of the subconscious reminiscences or echoes, in the use of the same word in the same position, e.g., मनोज्ञ R, IV, XXX, 34 and Ritus: III, 3, विपक्वशालि in R, IV, XXX, 47 and Ritus: III, 13, भिन्नाञ्जन Ritus . III, 5, IV, " and R, IV, XXVII, 13 and 14 probably of the earliest stratum कदम्बकूटार्जुनसर्जनीप in Ritus: III, 13. to be compared with the component elements कूटार्जुन, कदम्बसर्जार्जुन, नीपार्जुन

R, IV, XXVIII. 4, 34, 41.

Such details are not of much importance in themselves, but enhance the effect of the more obvious imitations. It is hardly necessary to enumerate trees, flowers and fauna mentioned by the two poets. Kālidāsa reproduces the conventional list for the two seasons already appearing in the epic Among the petty verbal

indications of an early date for the two passages in the Kiṣkindhakaṇḍa may be mentioned the absence of the extremely artificial word द्विरेफ for bee, common in Kālidāsa.

To sum up I would suggest that it has been possible to isolate in Sargas 28 and 30 of the Kiṣkindhakaṇḍa two passages Ṛituvarṇana by an early Kāvya writer who represents a stage of literature perceptibly later than that of the original epic; and that these passages were already in the Rāmāyaṇa as known to the young Kālidāsa (or other author of the Ṛitusaṁhāra) and had an immense influence on him and through him on the poetry of the Seasons in classical Sanskrit

# The Psychological Simile in Aśvaghoṣa

By C. W. Gurner

The psychological interest is one of the outstanding characteristics of the Sanskrit poetry of Aśvaghoṣa.[1] This indeed is only natural to a writer who was a teacher and philosopher before he was a poet, and whose Kāvya writing is professedly intended as "a medicine for a mind diseased" or in his own words as a bitter drug sweetened with honey (S. XVIII, 63). In illustration of this attitude one might dwell at some length on his development of psychological detail. The picture of indecision in departure (S. IV, 42 and B. IX, 71) of the body that goes while the mind remains (B. VI, 67) are instances which were imitated by later writers. The analysis of mental trouble (S. VIII, 5 ff) and the process of education and conversion (S. X, 42; S. XII, 1 ff; S. XVI, 52–67) have for Aśvaghosa a profound technical interest of their own. He brings to bear on these themes whole batteries of similes in his effort to derive from Kāvya writing the maximum of didactic power, such for instance as the series illustrating concentrated effort on self-improvement by digging for water, fire sticks, river erosion, cultivation, pearl fishing, conquest, etc. (S. XVI, 97-98). The later Sargas of Saundarananda are dotted throughout with these similes for mental states, *e.g.*, for the impulse to dharma through faith from the faith that promotes digging for water and cultivation of the fields (S. XII, 33), for the unworldliness of the saint from the detachment of the gold from dust and of the lotus from water (S. XIII, 5, 6), and for the stages of enlightenment from the processes of working gold (S. XV, 66-67 ff). In particular, whether from some special acquaintance with medical science, or from the obvious aptness of the comparison, Aśvaghoṣa applies, with remarkable frequency, by simile and otherwise, the terms of sickness and medicine to mental states. Especially significant is a long technical passage about the treatment of Kapha, Pitta, and Vayu (S. XVI, 59-69), and commonplaces of simile such as the unpleasant dose (S. V, 48), unsuitable food (B. IX, 39), the antidote to poison (S. XII, 25; S. XVIII, 9), "complications" (S. XVII, 9), the world as a sick man (B. XIII, 61), and the analogy of illness to sorrow (B. VIII, 76) are scattered through the two poems.

---

[1] N.B.—Editions referred to are :—
Buddhacharita—B B. Cowell, Oxford, 1893.
Saundarananda—E. H. Johnston, Oxford, 1928.

It is not my object in the present note, however, to study the psychological interests of Aśvaghoṣa as a whole, but to draw attention to a localised feature in his poetry which is derived from these interests. This is the use of what may be called the introspective or psychological simile, the simile from consciousness and conduct, used either to illustrate a purely external object described or, more frequently, to illustrate one process of consciousness or conduct from another.

Now this is something distinctive in literature. It is not uncommon for a poet to draw a simile from natural objects for mental experience, from moving water to indecision for instance And the reverse process of using the mental experience as the source of the simile is not unknown even to the Sanskrit epic. The frequency, however, with which it occurs in Aśvaghoṣa gives quite a special note to his Kāvya, and one may fairly suggest that it is largely through Aśvaghoṣa's influence that this type of simile does find an established, though by no means so prominent a place, in later Kāvya, including, of course, that of Kalidasa.

Let us take, to begin with, this type of simile in Aśvaghoṣa in its simplest form, a mere commonplace illustrating a scene. The Āsram, at the opening of the Saundarananda with its sandy stretches, suggests artificial colour on the limbs साङ्गराग इवाभवत, a purely external personification (S. I, 7) It is "befriended" by its lakes बन्धुमानिव यस्सरो (S. 1, 8):--a commonplace, but the process of illustrating a theme from consciousness has begun, while finally, 'It looked fair, and flourished with its line of forest in full growth of flower and fruit like a man with good means" नर: साधनवानिव (S. I, 9) Precision as to the idea introduced by the isolated and unexpected epithet—good works or material resources—is hard to reach, but the passage as a whole well illustrates the tendency to draw simile from facts of consciousness and conduct.

Except by way of introduction, these three verses do not attract much attention. Turn now to a fully developed passage in the use of the psychological simile to describe external action, the attack on the Buddha of the hosts of Mara (B. XIII, 46-51). "The arrow which another placed on his bow burst there into flames and leapt not forth, as the wrath of an impatient man devoid of self-control is rendered futile. The five arrows discharged by another remained stationary in the air, nor fell on the saint, like the five senses of a philosopher fearful of the world at the approach to the sensual field. And he who with murderous intent seized and aimed a club in anger against the saint fell helpless from inopportune effort as the world falls into vices to its own undoing A cloud-black woman skull in hand with intent to charm the seer's mind moved unsteadily to and fro, nor stood fast, like the understanding of the fickle-minded man in study. One directing his flaming

eye to burn up the saint with the fire of his eyes, like a poison-snake, saw him not sitting there, as a man given to sensual passion sees not the good in which he is instructed. Another lifting a heavy rock struggled in vain, with his effort thwarted like one desirous by fatigue of the body to attain the highest dharma approachable only through knowledge and contemplation." It will be obvious, as this long introspective passage goes on, how Aśvaghosa has sacrificed his descriptive power to his psychological and didactic interest. The simile from impotent passion does throw a touch of vividness on the arrow ablaze on the bow string. But by the end of it the laboured simile from mistaken spiritual endeavour to the Sisyphus effort with the rock serves no genuine purpose of a simile, but is introduced primarily for its didactic value on a favourite Buddhist theme

This is quite the most striking and sustained passage in illustration of the external from consciousness and conduct, implying, as it does, the psychology of intellectual application and of sense control as well as a whole background of moral principles More vaguely imaginative is the quasi-personification of the āsram with its sacrificial fires, groups of rishis, and the murmur of devotions in its shrine as the fulfilment of dharma (B. VII, 33) Just as in a more commonplace passage Buddha himself is the image of Dharma (B. X 19). (Certain other elaborate allegorical presonification of Dharma lie outside my present scope.)

On the other hand, a purely descriptive passage in the Saundarananda of animal life in the thickets of the Mountainside has unexpectedly, if not indeed inappropriately, two illustrations of a more subtle and less didactic psychological significance. "The Chamar was caught in the hanging branches amid the waving Kadamba flower on the mountainside and could tear away the tail adhering no more than a man of noble conduct can tear away affection bred in the family" (S. X, 11) (whether affection be personal or of high ideals). And again, "from hill to hill the monkeys weighed down the Devadaru trees as they passed along, and obtained not fruit in sufficiency, as suppliants from lords whose favour is ineffectual" (S. X, 14). These two instances come, it should be mentioned, in one of Aśvaghoṣa's more highly developed passages of Kāvya writing, in which, as in so many of these, coincidences with the later Kāvya can be traced.

However subtle they may be, similes of this kind from psychology to an observation of nature are handicapped in point of literary satisfaction by their inverse character. When you compare an animal's tail stuck in a bush to instincts of innate nobility, if it is not meant as a bad joke, and we may acquit Aśvaghoṣa of that intention, your mind is really running on the subtle and transcendent psychological process which a

chance fact of nature has suggested. As an illustrative simile one may say frankly that it is a bad one, and so used, lacks literary charm It is more easy to appreciate the value of these introspective similes when the poet is illustrating not external objects from the mind, but one phase of consciousness and conduct from another.

In a passage modelled closely on the Rāmāyana the charioteer is appealing to the young Suddōdhana by all human ties to abandon his ascetic intentions and to return from the forest to the palace (B. VI, 31 ff). "Therefore reject not thine aged loving father, devoted to his son, as an atheist the true religion, and forget not thy second mother outworn in thy upbringing as a thankless man a good deed, and abandon not thy lady, virtuous daughter of a noble house devoted to her lord, as a coward the worldly fortune in his hands, nor relinquish thy noble child Yasodhara, as a waster relinquishes his high good name" It is all perhaps a little tedious and mechanical in this sustained form, and yet there is a distinctive literary element in the blending of the double psychological theme, which, in Aśvaghosa's time was probably new to Sanskrit poetry (as distinct from philosophical writing).

The cardinal point in Aśvaghosa's psychology, especially in its ethical bearing, lies in that distinction between the self and senses, or between the mind and senses, which is the moral background of Kāvya poetry. Quasi-personification of the senses—the "enemies", the "steeds"—had become a commonplace of literary writing long before Aśvaghosa's time. It is Aśvaghosa, however, who creates out of this quasi-personification a deliberate and laboured system of psychological simile. We have seen one instance above, in which the five arrows of Māra, symbols themselves of the five senses, remain inert against the Buddha as the senses of a saint. In another passage, the ordered moral life of the individual becomes the picture of the well-ordered state. "As the king followed this course, his servants and citizens behaved likewise, even as the senses of a man in disciplined devotion with peace in his soul and mind at ease."

शमात्मके चेतसि विप्रसन्ने प्रयुक्तयोगस्य यथेन्द्रियाणि। B. II, 45.

And योगः here carries with it, no doubt, not only its primary sense of religious discipline but also the germ of the contrast between devotion to religion and devotion to the State, of asceticism and the royal life, elaborated, for instance, in the eighth Sarga of Kalidasa's Raghuvamsam. Similarly, the state of the five senses at different points of psychological experience is called on to illustrate the attitude of disciples to a teacher, the approach of the five beggar disciples to Buddha in asceticism and their subsequent desertion. The former thought takes a curious turn :—It is not the senses surrendering themselves

to the mind but the complete well-being of the successful worldly man, which points the comparison. "Five beggars desirous of being released saw him there and came near to him as sensual objects to a lord whose good works have won wealth and health" (B. XII, 89). And later on, they abandon him as the five elements leave the wise man on his release (B. XII, 111), पञ्चभूताः here meaning apparently the five sensual faculties. Not unconnected with the latter simile is that from the consciousness of dying. Says the man in the street, when the charioteer returns without the Suddōdhana, "There is no desire in us to live without him as in bodily beings at the passing of the senses" (B. VIII, 12). In another passage life goes from the body as a departing guest More definitely psychological is the transference of idea from the grief of a man's own dying to that of the Hedonist relapsed from Heaven on exhaustion of his merit (S. XI, 51).

It will be seen that, in most of these instances, it is not the mere conventional analogy but the appreciation of a conscious process of thought or feeling, which gives to these similes of Aśvaghosa, pedantic as they might seem, their peculiar vitality What echoes may there be of the emotional and moral conflicts the philosopher-poet in Buddha's consolation to Saundarananda on parting from his wife? When Saundarananda is following the saintly life she will have no happiness in her home, as in the mind of a philosopher, pure and at peace, his purpose finds no pleasure in passion (S XVIII, 60) There is the same sense of mental conflict in the simile from divorce for renunciation of passion. Saundarananda is tempted in the forest by sensual thoughts and abruptly cast aside the idea of passion that is a stumbling block to devotion as a wise man angered at heart puts aside a woman of loose conduct, howsoever dear (S XVII, 8)

In a more conventional tone the sensual delights forced on Suddhōdhana recall the familiar temptation of the saint, "The prince was led by force to the grove filled with troops of women as a saint whose vows are fresh, fearful of stumbling-blocks is led to the palace of the lord of Alaka where lovely Apsaras dance" (B. III, 65). Kubera and Indra are after all, in Kāvya poetry, little more than symbols for earthly royalty Aśvaghoṣa too, no doubt, had reluctantly attended a palace Nautch.

It is far from being the case with Aśvaghoṣa that interest in human affection is absorbed entirely by the theme of passion, but the quieter emotional experiences of ordinary friendship present fewer opportunities for the psychological simile. Ingratitude has been mentioned as a simile for desertion of the home. The purely conventional tag, "embracing his resolve as a friend" (B. XIII, 43) like the conventional personification of dharma need only be mentioned on the one hand as linking up Kāvya with the sententious, moralising, for instance, of Manu,

and on the other hand, as a parallel to the simple simile for external proximity which was the starting point in this article. More distinctive is the saying, "Friendship with bad company is as unstable as good fortune in the hands of a coward" (B. XI, 3) (another reminiscence of the passage on desertion of the family). But this is very different from the subjective analysis of one psychological experience with a view to heightening the value of another, which constitutes the special note of most of the similes quoted.

These notes on Aśvaghoṣa's use of the psychological simile may suggest something of the peculiar mentality with which this intellectual approached his enforced, if not, one suspects, wholly uncongenial task of inculcating doctrine through Kāvya. The self-expression in poetry of the philosopher-missionary gave the introspective thought a place in literary Sanskrit which, but for his agency, it might not have assumed. To complete this study it would be necessary on the one hand to derive the origin of this feature from the unliterary writing of the earlier Sanskrit philosophers and from the earlier form of literature in the epic, and on the other hand, to follow out its influence in the Kāvya of the classical period. It would probably prove to be not the least weighty of the touches given by Aśvaghoṣa towards shaping the course of Sanskrit poetry

CALCUTTA:
*February*, 1929

# The Language of Aśvaghoṣa's Sāundarananda-Kāvya

By SUKUMAR SEN

## INTRODUCTORY

The text of the Sāundarananda, a poem in Sanskrit by Aśvaghōṣa, has been for the first time edited by Mahāmahōpādhyāya Haraprasāda Śāstrī in the *Bibliotheca Indica* series and published in 1910. The discovery and publication of this poem, one of the most noteworthy specimens of Sanskrit kāvya literature, which was so long lost, forms a most valuable contribution enlarging the horizon of our knowledge of Sanskrit literature, for which we are indebted to the scholarship of this *doyen* among Sanskrit *savants* in India.

It is extremely fortunate that the text of the poem is preserved *in toto*, and in a much better condition than that of the Buddhacarita, the only other poem extant of Aśvaghōṣa (barring the dramatic fragments discovered in Chinese Turkistan)[1] As a piece of poetic composition the Sāundarananda by far excels the Buddhacarita[2] which was perhaps the earlier work. Though there exist no Chinese or Tibetan versions of the Sāundarananda, yet there is reason to believe that in India it was more widely read than the Buddhacarita[3] The popularity of an author or work can frequently be attested from the number of lines or verses which have passed into the speech and have become part of its treasury of proverbs and *bons mots*. Some of the verses of the Sāundarananda have passed into the stock of "good sayings" in Sanskrit *Belles Lettres*. Thus, part of the following verse:

> *vacanēna haranti varnanā*
> *niśitēna praharanti cētasā* |
> *madhu tiṣṭhati vāci yōṣitām*
> *hṛdayē halāhalam mahad viṣam* ||

'They with their words take away (the faculty of) speech, and with (such) sharp (weapons) they smite the hearts (of men); honey lies in the tongue of women, and deadly poison

---

[1] Edited by Professor Lüders under the title 'Bruchstücke Buddhistischer Dramen,' Berlin, 1911.

[2] The Buddhacarita of Aśvaghōṣa, E. B. Cowell, Oxford, 1893.

[3] The Sāundarananda-Kāvya, editor's preface, pp. xx, xxi.

in their heart' [S. [1]8. 35]—occurs in Bhartrhari's Vāirāgya-Śataka amplified with a conceit:

> *madhu tisthati vāci yōsitām*
> *hrdi halāhalam ēva kēvalam* |
> *ata ēva nipīyatē 'dharō*
> *hrdayam mustibhir ēva tādyatē* ||[2]

Even the great Kālidāsa has borrowed phrases and expressions from Aśvaghōsa, which will be shown *infra*.

The language of the Śāundarananda, though not violating Pāṇini's grammar to any very great extent, is interesting, as it differs materially from the stereotyped classical Sanskrit of the Kāvya literature. It is, in fact, a link between the epic Sanskrit, as in the Mahābhārata, and the ordinary grammatical 'classical' Sanskrit.

From the formidable array of grammatical forms not in ordinary use, which remain only as grammatical curiosities (and scare-crows to the students of Sanskrit), one is tempted to think that the Śāundarananda (and also the Buddhacarita) was written by the poet as a text-book for teaching Sanskrit to his pupils. The following passages with their uncommon verbal forms remind one strongly of the Bhattikāvya evidently it is Grammar and Belles Lettres both, which Aśvaghosa seeks to combine in its work

---

1 S=The Śāundarananda

2 This verse is the verse No. 3380 of the Subhāsitâvalī where it is attributed to the joint authorship of Kālidāsa and Māgha. This confusion is due to the antiquity of the verse. Bhartrhari's Nīti-śataka contains two verses which are ascribed to Bhadanta Aśvaghōsa in the Subhāsitâvalī. These are—

> *kadarthitasyāpi hi dhāiryavrttēr*
> *na śakyate sattvagunah pramārstum* |
> *adhōmukhasyāpi krtasya vahnēr*
> *nādhah śikhā yāti kadācid ēva* |

'The placidity of temper of one who is patient of mood cannot be destroyed even when he is insulted; the flame of the fire which has been put face downwards does not proceed in a downward direction [No 528 of the Subhāsitâvalī=No 227 of the Śārngadharapaddhati ] This verse occurs in the Pañcatantra with the variant (b c), *buddhēr vināśo na hi-śankanīyah adhahkrtasyāpi tanūnapātah*

> *nāivākrtih phalati nāiva kulam na śilam*
> *vidyā sahasragunitā na ca vāgviśuddhih* |
> *karmāni pūrvaśubhasañcayasañcitāni*
> *kālē phalanti purusasya yathāiva vrksāh* |

'Neither the appearance, nor family, nor character, nor learning although a thousandfold in extent, nor again clearness in speech does bear fruit · only the deeds of a man with their accumulation of merit gathered up from yore bear fruit in time, even as trees' [No. 96 of Telang's Edition=No. 3100 of the Subhāsitâvalī ] Three other verses in the Subhāsitâvalī [Nos. 198, 529, 3141] are ascribed to Aśvaghōsa.

> *a v a r dh i ṣ ṭ a guṇāiḥ śaśvad*
> *a v ṛ dh a n mitrasampadā* |
> *a v a r ti ṣ ṭ a ca vṛddhēṣu*
> *n ā v ṛ t a d garhite pathi* || [2. 26].

'[Śuddhôdana] perpetually increased in virtues, and prospered in the fortune of friendship: [he] attended the aged, [and] never trod in the path that was blamed'

> *dānāir ajasrāir vipulāiḥ sōmaṃ viprān a s u ṣ a v a t* |
> *rājadharmasthitatvāc ca kālaṃ sasyam a s ū ṣ a v a t* ||

'With incessant and bountiful gifts he caused Brahmins to press Sōma (*i.e.* hold the Soma sacrifice): through his adherence to kingly duties he would cause the harvests to be produced in [proper] time' [2 31].

> *śarāir a ś ī ś a m a c chatrun*
> *guṇāir bandhūn a r ī r a m a t* |
>
> *randhrāir n ā c ū c u d a d bhṛtyān*
> *karāiḥ n ā p ī p i d a t prajāḥ* ||

'He quelled his enemies with [his] arrows; with his virtues he captivated his friends; he never led his servants to difficulties; he never oppressed [his] subjects with taxes' [2. 27].

> *r u r ō d a m a m l ā u v i r u r ā v a j a g l ā u*
> *b a bh r ā m a t a s th ā u v i l a l ā p a d a dh m ā u* |
> *c a k ā r a rōsaṃ v i c a k ā r a mālyaṃ*
> *c a k a r t a vastraṃ v i c a k a r ṣ a vaktram* ||

'She wept, she became pale; she cried. she drooped; she wandered, she stood still; she mourned, she blew; she felt angry, she threw away the garland; she tore at the clothes, she scratched her face' [6. 34].

> *śrutvā tataḥ sad-vrataṃ u t s i s ṛ k ṣ u m*
> *bhāryā-d i d ṛ k ṣ u m bhavanam v i v i k ṣ u m* |
> *nandaṃ nirānandam apētadhāiryam*
> *a bh y u j j i h ī r ṣ u r munir ājuhāva* ||

'Then on hearing that Nanda, cheerless and devoid of patience [was] desirous of giving up the good vow. and wished to see [his] wife, and to enter [his] home, the sage wishing to rescue him, called [him]' [10. 1].

Examples can be cited *ad infinitum*.

The poem, although didactic, by no means lacks in high poetic excellence. The style is easy and graceful. The poem is studded with beautiful similes. The following may be quoted as illustrative instances:

*virējur harinā yatra suptā mēdhyāsu vēdiṣu |*
*salājāir mādhavīpuṣpāir upahārāḥ kṛtā iva ||*

'Where the deer looked beautiful, sleeping on the holy altars: together with *mādhavī* flowers and fried paddy—they looked as if they were offerings [on the altars]' [1. 12].

*sā hāsahamsā nayanadvirēphā*
*pīnastanābhyunnatapadmakōśā |*

'She was swan-white in (the brightness of) her smile; she was bee-eyed (in the darkness of her glances); and her full breasts were like upstanding lotus buds' [4. 4ab]

*tasyā mukham tat satamālapatram*
*tāmrādharōṣṭham cikurāyatākṣam |*
*raktādhikāgram patitadvirēpham*
*saśāivalam padmam ivābabhāsē ||*

'That face of hers, with *tamāla*-leaf decorations with upper and lower lips both red, and with wide eyes extending to her sidelocks, looked beautiful like a lotus deep-red at the tip, with a (black) bee resting in it, and having (dark) moss (at the edge)' [4. 21].

*nisaṇṇavaktrā na rarāja cāsu*
*vivarṇacandrēva himāgamē dyāuḥ ||*

'Like the sky in winter, its moon in pallor, pale of face, she too did not appear bright for a long time' [6 9cd].

*lēkhāratham ādarśam ananyacittō*
*vibhūṣayantyā mama dhārayitvā |*
*bibharti sō 'nyasya janasya tañcēt*
*namō 'stu tasmāi calasāhṛdāya ||*

'After having held the mirror in front of me (to enable me) to draw the (sandal paste) figures (on my cheeks) while adorning myself—his mind not being elsewhere all the while—should he be bearing the same mirror for some other person, I (only) make my humble bow to him of a fickle heart' [6 18]

*sā cakravākīva bhṛśam cukūja*
*śyēnāgra-pakṣa-kṣata-cakravākā |*
*vispardhamānēva vimāna-saṃsthāiḥ*
*pārāvatāiḥ kūjana-lola-kaṇṭhāiḥ ||*

'She wailed, disconsolate like the female *cakravāka* duck whose mate's wings have been injured by a hawk and rivalling, as it were, the pigeons seated on the terrace pavilion, their throat [emitting] sweet cooings [6 30].

*tābhir vṛtā harmya-talē 'nganābhiś*
*cintā-tanuḥ sā sutanur babhāsē |*
*śatahradābhiḥ parivēṣṭitēva*
*śaśāṅka-lēkhā śarad-abhra-madhyē ||*

'She, with her slim figure emaciated with anxiety, and surrounded by those ladies on the floor of the palace, appeared like the thin crescent of the moon surrounded by lightning flashes in the midst of autumnal clouds' [6. 37].

> *vahnāyatē tatra sitē hi śṛṅgē*
> *saṃkṣipta-varhaḥ śayitó mayūraḥ* |
> *bhujē balasy áyata-pīna-bāhōr*
> *vāidūrya-kēyūra ivâbabhāsē* ||

'There [in the Himalayas] upon the white peak the peacock roosting with its plumes gathered in looks like fire ; the peacock looked beautiful, even as the beryll armlet on the arm of the long-and-stout-armed Balarāma' [10. 8].

> *kāsāñ cid āsām vadanāni rējur*
> *vanântarēbhyaś cala-kundalāni* |
> *vyāviddha-parṇēbhya ivâkarēbhyaḥ*
> *padmāni kādamba-vighattitāni* ||

'Through the recesses of the woods the faces of some of the ladies with their dangling earrings appeared beautiful, even as lotuses through the thick-leaved lotus plants swayed by grey swans' [10. 38]

These quotations would suffice to show that Aśvaghōsa was a great poet, and that it reflects no discredit on the great Kalidāsa if he thought it better to develop some of the suggestive similes of Aśvaghōsa

It is admitted on all hands that Kālidāsa was posterior to Aśvaghōsa It requires no fresh proof to establish this, though thousand and one fresh ones can be given.[1]

Kālidasa was probably indebted to the Sāundarananda for the execution (not the *motif*) of the Kumārasambhava. It would require a separate paper to discuss the common features of these two poems. Some phrases and expressions from the Sāundarananda are given below, which are found unchanged in the works of Kālidāsa.

> *kim atra citram yadi [vīta-mōhó*
> *vanam gataḥ svastha-manā na muhyēt]* |

'What is strange here, if he, once gone to the forest, rid of his infatuation and easy in mind, were not to yield again?' [16 84].

Cf. *kim atra citram yadi [kāma-sūr bhūr*
*vṛttē sthitosyâdhipatēḥ prajānām]* |

1. Mr. Kshetreśachandra Chattopādhyāya in his learned paper on 'The Date of Kālidāsa,' reprinted from the Allahabad University Studies, vol. II, has tried to show, from the comparison of similar ideas from the works of the two poets, that Kālidāsa preceded Aśvaghōṣa; but from the very same comparisons one can easily deduce the converse proposition.

'What is to be wondered at here if the earth give the desired objects to you who practise (all) the duties of the lord of men?' [Raghuvaṃśa 5. 33].

[*pramadānām*] *agatir na vidyatē*, 'for women, there is no forbidden place, *i e.* they are ever and everywhere irresistible' [8 44].

Cf. [*manōrathānām*] *agatir na vidyatē*, 'for the wishes of the heart there is nothing forbidden or unapproachable' [Kumārasambhava 5. 64].

> [*karṇânukūlān avataṃsakāmś ca*]
> *pratyarthibhūtān* [*iva kuṇḍalānām*] |

'Flower decorations matching the ears, and defying, as it were, the earrings' [10. 20].

> Cf. *pratyarthibhutām* [*api tām samādhēh*
> *śuśrūsamāṇām giriśō' numēnē*] |

'Giriśa allowed her who was willing to serve [him], though [she was] an obstacle in his meditations' [Kumarasambhava 1. 59]

[..*nanṛtus tathânyāḥ*..] *stana-bhinna*-[*hārā*] 'some again danced about with their necklaces displaced from [their] breasts' [10 36].

Cf [*cacāla bālā*] *stana-bhinna*-[*valkalā*], 'the girl moved [and her] bark garments [were] displaced from the breasts' [Kumarasambhava 5. 84]

> [*babhūva sa hi saṃvegah śrēyasas tasya vrddhayē* |
> *dhātōr adhir ivâkhyātē paṭhitô 'ksara-cintakāih* ||]

'That mental agitation of his served for the growth of (his) fortune; just as the prefix *adhi* is attached to the root (*i*) (to give a new root in the lists) by those who busy themselves with syllables (*i e*, grammarians)' [12. 9]

Cf. *dhātōḥ sthāna ivâdēśam sugrīvam saṃnyavēśayat* '[Rāma] established Sugrīva [firmly] like the stem form in place of the root' [Raghuvaṃśa 12 58][1]

*śruta-mahatā* [*śramaṇēna*] 'by the *śramana* of great learning' [9. 50]

---

[1] It is remarkable that Aśvaghōsa and Kālidasa have given only two grammatical similes each In addition to the above the others are

> *natu kāmâtmanas tasya kēnacid jagrhe dhrtiḥ* |
> *trisu kālēsu sarvēsu nipāto 'stir iva smrtah* ||

'Peace of mind could not in any way be attained by him as his soul was filled with passion: just as the verb *asti* as an indeclinable is fixed in its form in the three tenses.' [12. 10].

Cf *sō'bhavad varavadhū-samāgamah prakrti-pratyaya-yōga-sannibhaḥ* | 'Then the union of the bridegroom and the bride appeared like the union of the stem and the affix' [Raghuvaṃśa 11. 56]

Cf. Sukumar Sen, Indian Historical Quarterly, Vol ii, p. 657 ff

Cf. [*sarasvatī*] *śruta-mahatām* [*mahīyatām*] 'may the knowledge of the great learned be honoured' [Abhijñānaśakuntala, VIII].

[*sô 'niścayān*] *nâpi yayāu na tasthāu*, 'owing to indecision he could neither move nor stay' [4. 42].

Cf. [*śāilâdhirājatanayā*] *na yayāu na tasthāu*, 'the daughter of the king of mountains neither moved nor stayed' [Kumārasambhava 5. 85].

*śaśāṅkalēkhā* [*śaradabhramadhyē*] 'like the crescent moon under the autumnal clouds' [6. 37].

Cf. *śaśāṅka-lekhām iva pasyatô divā*
*sacētasaḥ kasya manô na dūyatē* ||

'Looking at her as at the crescent moon in day-time who is there with a heart whose mind does not ache?' [Kumārasambhava 5. 48].

[*katham kṛtô 'siti jahāsa côccāiḥ*
*mukhēna*] *sācīkṛta* [*-kuṇḍalēna*] |

'She laughed aloud; "how have you done?"—her face awry, with its earrings.' [4. 19].

Cf. [*yathâvakāśam ninīya*] *sācīkṛta* [*-cāruvaktraḥ*] |

'He passed the while, his handsome face turned sideways' [6. 14].

*vātēritaḥ pallavatāmrarāgaḥ*
[*puṣpôjjvala-śrīr iva karṇikāraḥ*] |

'Like unto the *karṇikāra* (tree), swayed by the breeze, red in hue with its twigs, charmingly bright with blossoms..' [18. 5].

Cf. *pracakramē pallavarāgatāmrā*
*prabhā pataṅgasya munēś ca dhēnuḥ* |

'The cow of the sage and the rays of the sun, both red in hue like new leaves, began to move' [Raghuvaṃśa 2. 15];

and—*ēsō vādērida-pallava-'ṅgulīhim tuvarēdi via mam kēsararukkhaō*, 'this *keśara* tree urges me, as it were, with its finger-like moving shoots' [Abhijñānaśakuntala I].

The Bhagavadgītā must have been known to Aśvaghōṣa, as some of the verses in the Sāundarananda seem to be paraphrased from the Bhagavadgītā. Thus:

*tataḥ smṛtim adhiṣṭhāya capalāni svabhāvataḥ* |
*indriyāṇîndriyârthēbhyô nivārayitum arhasi* ||

'Now since you have resorted to contemplation it is proper for you to check the naturally fickle senses from [enjoying] the objects of the senses' [13. 20].

Cf. *tasmād yasya mahābāhō nigṛhītāni sarvaśaḥ* |
*indriyāṇîndriyârthēbhyas tasya prajñā pratiṣṭhitā* ||

'O long-armed one, of him, whose senses are completely restrained from [the enjoyment of] the objects of the senses, the knowledge is firmly grounded' [Bhagavadgītā 2 68]. Compare also Bhagavadgītā 2. 58

*viṣayāir indriyagrāmo na tṛptim adhigacchati* |
*ajasram pūryamāṇo 'pi samudrah salilāir iva* ||

'The senses do never attain satiety in the objects [of the senses], like the ocean though incessantly supplied with waters' [13 40]

Cf. *rāgadvēṣavimuktāis tu viṣayān indriyāiś caran* |
*ātmavaśyāir vidhēyātmā prasādam adhigacchati* ||

'Employing the senses purged of attachment and abhorrance and under the control of the self, the self-controlled one attains peace' [Bhagavadgītā 2. 64];

and—*āpuryamāṇam acalapratiṣṭham*
*samudram āpah praviśanti yadvat* |

'Just as the waters enter the ocean that is being filled up ......' [Bhagavadgita 2. 70]

THE LANGUAGE

As has been previously remarked the language of the Sāundarananda stands between the epic Sanskrit, as in the Mahābhārata, and the 'classical' Sanskrit of the grammarians Except a very few stock words and phrases it has no affinities with Buddhistic Sanskrit It has greater affinities with the epic Sanskrit.

Examples of forms and usages which do not ordinarily occur in classical (Paninian) Sanskrit alone have been quoted

The text having been preserved in a much better condition, there occur much fewer anomalous forms in the Sāundarananda than in the Buddhacarita Some of these again may be ascribed to the blunder of the scribes.

Some peculiar forms are noted below.

Nominal forms: *varṣa*, shower' [2. 53 etc.] used as neuter throughout, so also in B[1]; *māitrā* 'friendship' [8. 1], instead of *māitra*, or *māitrī*; *sravatīm* [accusative singular of the feminine of *sravant*, 'oozing'; 8. 52] instead of *sravantīm*; *śrēṣṭhatama*,[2] 'best, most exalted' [18. 34], (this is found in the epics); *śraddadhānatā*, faith' [12. 30], occurring in the Manusamhitā 7. 86; cf. *śraddadhānavat*, 'trustful' [Vāmanapurāṇa].

Verbal forms: *gṛhya*, 'having taken' [1. 28], occurring in the epics, also in B., *avāihi*, 'know you' [16. 14. 48] instead of *avēhi*; *avāitya*, 'having perceived' [16. 23], instead of *avētya*.

---

[1] B.=The Buddhacarita, edited by E. B. Cowell, Oxford, 1893.
[2] It occurs in the Vedic: also in Avesta, *sraēṣtatəma*.

## 1. The Noun : Use of the Cases

The use of the cases in S., is interesting as it has some very remarkable differences from that of classical Sanskrit. It is discussed below in some detail.

### *The Accusative*

The cognate accusative is a characteristic feature of the Vedic language; but in classical Sanskrit it is of very rare occurrence. In S, as well as in B., the cognate accusative is found frequently, especially with verbs meaning 'to speak'. In this point the language of Aśvaghōṣa has some agreement with Buddhistic Sanskrit where however it is found to a far greater extent

Examples: *tāpasās tēpirē tapaḥ*, 'the hermits practised penance' [1. 16]; *brahmacaryaṃ cacāra saḥ*, 'he led the life of a religious student' [11. 4]; *dīrgham ca niḥśvasya vacô bhyuvāca*, 'sighing heavily he uttered the speech' [4 33]; *pramṛjya cà śrūṇi vacāṃsy uvāca*, 'wiping out the tears she uttered [these] words' [6. 38], cf. *gambhīra-dhīrāṇi vacāṃsy uvāca*, '[the sage] uttered [these] grave and calm words' [B. 1. 59]; *śramaṇaḥ.. vākyam uvāca vipriyam*. 'the sage spoke the unpleasant word' [8 22]; *kṛtâñjalir vākyam uvāca nandaḥ*, 'Nanda, with folded palms, spoke the speech' [10. 49; 18 39]; cf. *tanayam vākyam uvāca śākyarājaḥ*, 'the king of the Śakyas spoke the word to the son' [B. 5 36]; *sagadgadam vākyam idaṃ babhāṣē*, 'he uttered this speech chokingly' [5. 7]; *vāṇīm imām ātmagatāṃ jagāda*, 'he muttered this speech to himself' [17 62]; cf *vāṇīm ca bhavyârthakarīm uvāca*, 'he spoke the speech full of auspicious meaning' [B 1 34]; *giram ity uvāca*, 'he uttered this word' [6. 20, 10. 47; B. 7. 51, etc.]; *bhāikṣyam caran*, 'leading the life of a mendicant' [8. 59]; cf *cacāra bhikṣām sa ca bhikṣu-varyaḥ*, 'he, the best of the Bhiksus, went abegging' [B. 10. 13]

The accusative with verbs: *vi-grah*: *praṇatān anujagrāha vijagrāha kula-dviṣaḥ*. 'he was favourable to those who submitted [to him, but] fought with those who were enemies of [his] race' [2. 10],—*vi-graha* is generally construed with the instrumental. cf. *katham anēna sārdham vigrahītuṃ samarthaḥ syāt*, 'how can he be able to fight with him ?' [Pañcatantra]; *smṛ* regularly construed with the accusative of person (so also in B.); *abhi-car*: *yas tvāṃ priyô nâbhyacarat kadācit*, 'as [your] lover never did false by you' [6. 21]; *anu-dah*: *tām anudahyamānāḥ*, '[they] mourning with her' [6. 36]; *śrad-dhā*:[1] 'to believe' [in a peculiar sense]:

> *antar-bhūmi-gatam hyambhaḥ śraddadhāti narô yathā* |
> *arthitvē sati yatnēna tadā khanati gām imān* ||

---

[1] See under the Locative.

'When a man believes [that there is] water underground, and if there is need he digs that ground carefully' [12. 33]; *sasyôtpattim yadi na vā śraddadhyāt karṣakaḥ kṣitāu*, 'if the tiller do not believe in the raising of crop in the field' [12. 35].

Verbal nouns ending in—*ā*, *e.g.*, *prayiyāsā gṛham ēva yēna mē*, 'as my desire is for entering the house [8. 13]; and—*u* govern the accusative [2. 6, 64 · 5. 13; 8. 7. etc.]; also the verbal noun ending in—*aka*: *yataś ca saṃskāragataṃ viviktam na kārakaḥ kaścana vēdakō vā* 'there is no doer or knower of intuitive actions' [17 20]

The accusative has once been governed with the adverb *anyatra*: *rāṣṭram anyatra balāir na sa kiñcid adīdapat*, 'he never cut anything except the kingdom with [his] forces' [2. 33].

The 'upasarga' *prati* has been used with the accusative to denote various case-relations.[1] Thus—*munāu bruvāṇēna tu tatra dharmaṃ dharmam prati jñātiṣu cādṛtēṣu*, 'though the sage [was] preaching *dharma* and [his] relations being attracted to the *dharma* ...' [4. 1]; *nandaḥ prayāṇam prati tatvarē ca*, 'Nanda hastened for going out' [4. 40]; *bhaktiṃ sa buddham prati yām avōcat*, 'the reverence which he professed for the Buddha' [6. 17]; *vṛddhyavṛddhyōr atha bhavēc cintā jñati-janam prati*, 'there would be anxiety about the weal and the woe of [one's] relatives' [15 30]; *sūryaḥ sa rambhām prati jāta-rāgaḥ*, 'the sun, he had love for Rambhā' [7. 26]; *rambhām prati sthūla-śirā mumūrcha*, 'Sthūlaśiras was infatuated with Rambhā' [7. 36]; *atha samrādhitō nandaḥ śraddhām prati maharṣiṇā*, 'now Nanda was drawn to faith by the great sage' [13. 1]: *jagāma nāivôpaśamam priyām prati*, 'he did not become cold towards [his] beloved' [9 1]; *gṛha-prayāṇam prati ca vyavasthitam śaśāsa nandam śramaṇaḥ sa śāntayē*, 'the sage admonished Nanda who resolved to go home, for the peace [of his mind]' [9. 4]; *ēvam-ādiḥ kramaḥ sāumya kāryō jāgaraṇam prati*, 'such procedure, O gentle creature, should be adopted for keeping awake' [14. 28]; *jahihi calam svargam prati rucim*, 'give up the mind for the unstable heaven' [11. 62].

In one instance the accusative has the sense of the causal instrumental or ablative, viz., *tadval lokē munir jātō lōkasyâ nugraham caran.. lōka-dharmāir na lipyatē*, 'similarly a sage born in the world and living as a boon to it.. is not concerned with the duties and obligations of the society' [13. 6].

*The Instrumental*

Cognate instrumental: *tataḥ kramāir dīrghatamāiḥ pracakramē*, 'then he strode with biggest steps [4. 45]; *tayā ratyâ bhiramsyasē*, 'you shall enjoy—with that enjoyment' [11. 35].

---

[1] So also in the Buddhacarita.

The instrumental with verbs: *pari-kṣip*, 'to throw, to sprinkle': *tad-āśramamahīṃ yāṃ tu parikikṣēpa vāriṇā*, 'that portion of the ground of the hermitage which he sprinkled with water,' [1. 13]; *sic* [2. 24]; *pari-sic* [5. 53; 10 53]; *lip* [13. 4, 5, 6]; *krīd*: *yatnēna pravigāhya sāgarajalam ratnaśriyā krīḍati*, 'having plunged into the waters of the sea plays with the fortune of jewels' [16. 98]; *bhid*: 'to be separated': *svajanah svajanēna bhidyatē*, 'a kinsman has rupture with [his] kinsmen' [8. 33]; *vṛdh*: 'to grow, to prosper': *avardhista gunāih śaśvad avṛdhan mitrasampadā*, 'he ever flourished in [his] virtues, and prospered with the fortune of friends' [2. 26]; *ram*: 'to rejoice': *tēnâbhirēmē tu gurōr mahimnā*, 'he rejoiced in that greatness of the master' [5. 4]; *ramatē tṛṣitô dhanaśriyā ramatē kāmasukhēna bāliśah ramatē praśamēna sajjanah*, 'the avaricious rejoices in the fortune of riches; the foolish rejoices in amorous pleasure; the good man rejoices in continence' [8. 26]; *sam-i*: 'to be united with'. *tvam ābhir niyatam samēsyasi*, 'you shall ever be in their company' [10. 63]; *vi-spardh*: 'to rival with': *vispardhamānā iva vimāna-samsthāih pārāvatāih kūjanalōla-kanthāih*. rivalling, as it were, with the pigeons seated on top floors, their throats sweet with cooing' [6. 30]

The verb *ram* is used periphrastically with *samam*, and *saha*: *dvāipayanō dharma-parāyaṇaś ca rēmē samam kāśiṣu vēśa-vadhvā*, 'the virtuous Dvāipāyana sported with a hetaera in the Kāśis' [7. 30]; *yadi kleśôtpādāih saha na ramatē śatrubhir iva*, 'if he does not find pleasure with the causes of pain as with enemies' [14. 52].

The instrumental with nouns—some of these are used periphrastically with *saman*, *sārdham* or *saha*: *artha* [12. 13]; *kārya* [11. 35]; *tṛpti* [5. 23]; *yuddha*: *kurusva yuddhaṃ saha tāvad indriyāih*, 'make battle with the senses' [9. 22].

The instrumental with adjectives and adverbs: *arthin* [12. 34, 35]; *varjita* [8. 21]; *vinākṛta*, 'separated,' *priyayā.. vinākṛtah*, 'divorced from his wife' [8. 20][1]; *vihīna* [14. 38]; *śūnya* [1. 38]; *sama* [5. 28]; *samēta* [4. 2]; *yuyutsu*, 'desirous of fighting'. *klēśāribhih..sārdham yuyutsuh*, 'wishing to fight with the enemies the pains' [17 33]; *vinā* [8. 13]; *hīna* [7. 25, etc.].

The adverbial instrumental: *dhanavatsu caranti tṛṣṇayā dhanahīnēsu caranty avajñayā*, '[women] deal greedily with the rich, and slightingly with the poor' [8. 40].

## The Dative

The dative with verbs: in S. the verbs meaning 'to speak,' etc., are as a rule construed with the dative, and very rarely

[1] This idiom is found in the Mahābhārata and frequently in B., e.g., *divākarēnêva vinākṛtam nabhah*, 'like the sky bereft of the sun' [8.5.]; etc

with the accusative. This a very old idiom which is but slightly preserved in the classical Sanskrit; the dative with verbs meaning 'to speak' began to be replaced by the accusative from the period of the Brahamanas. Thus · *kath* [9. 51]; *gad* [8 9. 10. 2]; *brū* [8. 11], *bhās* [16. 68]; *vac* [5. 48; 8. 4]; *ni-vēday* [2 19]; *śams* [5. 36]. With other verbs: *dā*, *vi-ruc*, *nam*,[1] *pra-nam*, *pranāmam kṛ*, *kḷp*, *vrt*, *pra-vrt*, *dhā*, *namas as*, *sprh* and *bhū*.

The dative with substantives and adjectives: *spṛhā*, 'desire': *tābhyah kim iti tē spṛhā*, 'why your desire for them?' [11. 31], cf. *na khalv iyam svargasukhāya mē sprhā*, 'this is not my desire for the heavenly pleasure' [B 8 66],—*sprhā* is regularly construed with the locative in classical Sanskrit; *pratibhū*, 'guarantee': *apsarah-prāptāyc yan mē bhagavan pratibhūr asi*, 'as you are O Lord, my guarantee for obtaining the celestial nymphs' [12. 13]; *utsuka*: *yasya kāmarasajñasya naiṣkarmyāyōtsukam manah*, 'of him who is a knower of amorous pleasures the mind is eager for renunciation' [12. 21].[2]

Dativus commodi: *sa tē kam artham kurutē tvam vā tasmāi karōsi kam*, 'what good does he do to you and what do you do to him?' [15 40]; *rajas tathâsmāi munir ācakarsa*, 'so the sage drew *rajas* for him' [10. 42].

Dativus finalis occurs very frequently, and often elliptically. *śrāmyantō munayō yatra svargāya*, 'where the hermits practising austerities for the heaven.' [1 17]: *yathā ksuh.. dahanāya śusyate*, 'as sugar-cane is dried for being burnt' [9. 31]; *tasmāt kāmā na tṛptayē*, 'hence the [sensual] pleasures [are not conducive] to satiety' [11 32], *vīryam hi sarvarddhayē*, 'prowess is for all prosperity' [16 98]; *vijayāya tasthāu* 'stood for victory' [17 23];

> *yē mṛgyamānā duhkhāya rakṣyamānā na śāntayē |*
> *bhrastāh śōkāya mahatē prāptāś ca na vitṛptayē ||*

'[The pleasures], which being sought [cause] unhappiness, which being pursued [do] not [serve] for peace, which, when lost, [is a cause] for sorrow, and which, when attained, [do] not [conduce to] satiety' [15. 9].

Dativus causalis.

> *yōgācāras tathâhāram śarīrāya prayacchati |*
> *kevalam ksud-vighātārtham na rāgēna na bhaktayē ||*

'*Yōgācāra* similarly allows food to the body only for quelling hunger, [and] not out of attachment or reverence' [14. 19]. This is very peculiar,—it might be due to *metri causā* (*bhaktayē* instead of *bhaktyā*).

---

[1] This verb also governs the locative, which is very peculiar: see *infra* under the locative.

[2] Pāṇini [2 3. 44] proscribes only the locative and the instrumental.

*The Ablative*

*vyath*: *parēbhyô nâpı vivyathē*, 'he did not suffer from the enemies' [2. 2, cf. 12-22]; *vi-vyath*: *bhujagād ivânyavibhavād vivivyathē*, 'he recoiled from other's property as from a viper' [3. 31]; *śikṣ* [1. 13]; *sraṃs* [2. 25]; *abhi-gam*, 'to attain' [3. 27]; *sam-śru* 'hear' [5. 36]; *pari-rakṣ* [6. 47]; *cal* [7. 34]; *śam* [9. 35]; *āp* [10. 14]; *jan* [11. 52]; *bhī*; *pari-muc* [13. 51]; *vi-muc* [14.44]; *pra-vṛt* [15. 6]; *sam-hṛ*, 'to collect' [15. 27]; *vi-śôdhay*, 'to purify' [15. 68]; *vāray*, 'to prohibit': *na dōṣataḥ paśyati yô hi dōṣam kas tam tatô vārayitum samarthaḥ*, 'who can restrain him from sin him who does not find sin in sin ?' [16. 75]

The ablative with substantives: *riraṃsā*, 'desire of abstaining': *riraṃsā yadi tē tasmāt*, 'if you have a desire of abstaining from it' [11. 34]; *nirmumukṣā*, 'desire of emancipation'; *duḥkhād yadi nirmumukṣā*, 'if there be the desire of escaping from pain' [16. 25]; *parāṅmukha*: *vanavāsasukhāt parāṅmukhaḥ*, 'disinclined to the pleasure of dwelling in forest' [8. 13.] etc The following example—*parēbhyaḥ saṃsargam pariharati yaḥ kaṇṭakam iva*, 'who avoids others' company like the thorn' [14. 50]—is a contamination between *parēbhyaḥ pariharati* and *parēṇa saṃsargam*

The ablative is found with the adverbs *ṛte*, *vinā*, and *prabhṛti* [15. 59]

The ablative with a superlative formation: *tatō bhuṅktē tridaśapatirājyād api sukham*, 'then he enjoys the pleasure superior to that of the dominion of the lord of gods' [14. 52], cf., *hṛcchayaḥ jyēṣṭhô rudrād api*, 'the god of love is greater than Rudra' [Mahābhārata 13. 85 17=4031].

The ablative for the superlative genitive:

> *śraddhā-dhanam śrēṣṭhatamam dhanēbhyaḥ prajñārasas tṛptikarô rasēbhyaḥ* |
> *pradhānam adhyâtmasukham sukhēbhyô 'vidyāratir duḥkhatamā ratibhyaḥ* ||

'The wealth of faith is the best of all the wealths; the enjoyment of knowledge is [best] conducive to satiety, of all enjoyments; the spiritual happiness is the chief of all kinds of happiness; the pleasure of *avidyā* (false perspective) is the sorriest of all pleasures' [5. 24].

*hitasya vaktā pravaraḥ suhṛdbhyaḥ* etc., 'one who gives good advice is the best among friends' [5. 25].

In the following instance the adjective implying comparison is dropped: *paramahilā dahanatô pyamanyata*, 'he regarded [all] women other [than his wife] worse than fire' [3. 32].

*Ablativus causalis* occurs in 1. 41; etc.

Elliptic ablative: *mahâpaṇēbhyô vyavahāriṇaśca mahāmunāu bhaktivaśāt praṇēmuḥ*, 'the merchants from big shops bowed to the great sage out of reverence' [5. 1].

*The Genitive*

The genitive with verbs: *anu-kṛ*, 'to imitate': *anucakrur vanasthasya dauṣmantēr dēvakarmaṇaḥ*, 'they emulated the forest-dwelling son of Duṣmanta, of divine activity' [1 36]; *vadhūr gṛhē sâpi tavânukurvatī kariṣyatē strīṣu virāgiṇīḥ kathāḥ*, 'she, the daughter-in-law, emulating you, shall discourse on the topics of renunciation, among the ladies' [18. 59]; *adhi-i*, 'to study': *adhyāista yaḥ paraṃ brahma nâdhyāiṣṭa satataṃ dhṛtēḥ*, 'who contemplated the supreme Brahman, but did not always contemplate on restraint' [2. 12]; *prajñāmayaṃ varma badhāna tasmān nāiṣyanti nighnasya hi śōkabāṇāḥ*, 'put on the mail of knowledge: whence the arrows of sorrow would not reach one who is low' [5. 30]; *śrad-dhā*: *nêcchanti yāḥ śōkam avâptum ēvaṃ śraddhātum arhanti na tā narāṇām*, 'these [women] who do not wish to come by such sorrow should not believe in men' [6. 19][1], *śru*, *tathâpi tāṃ ēva tadā sa cintayan na tasya śuśrāva*, 'still thinking of her he did not hear [him]' [9. 1][2]; *rājyam kṛ*: *rājyam kṛtvâpi dēvānāṃ papāta nahuṣō bhuvi*, 'though reigning over the gods Nahuṣa fell down upon the earth' [11 44][3]; *ruc*: *na martyēṣu na dēvēṣu pravṛttir mama rōcatē*, 'living among men or gods does not appeal to me' [12. 14][4], *apa-kṛṣ*: *bhōjanaṃ kṛtam atyalpaṃ śarīrasyâpakarṣati*, 'food taken in very small quantity does harm to the body' [14 4]; *brū*: *vijānataḥ paśyata ēva câhaṃ bravīmi samyak kṣayam āsravāṇām*, 'I preach the destruction of the pains only to the knowing and the perceiving [man]' [16 46][5].

The genitive used for *dativus commodi*:

> *lēkhârtham ādarśam ananyacittō vibhūṣayantyā mama dhārayitvā |*
> *bibharti sō'nyasya janasya taṃ cēt namō'stu tasmāi cala-sāuhṛdāya ||*

'Having [previously], with all attention, held the mirror for toilet before me when I were dressing, if he [now] holds it before another person, a bow be to that one of fickle attachment' [6 18]

The objective genitive, *sattvānām cânukampayā*, 'out of pity for the creatures' [2.55][6]; *hitasya vaktā*, 'the speaker of

[1] The genitive here represents the Old Indo-Aryan (Vedic) dative.

[2] The genitive here may represent the accusative or the ablative; but it is very likely that the genitive is a possessive one, some such word as *vacanam* being suppressed

[3] This is an old Indo-Aryan idiom lost in Sanskrit, except—though very rarely—with the verb *īś*.

[4] The genitive might represent the locative which is found in the classical Sanskrit, e g. *bhaktyā gurāu mayyanukampayā ca* [Raghu].

[5] The accusative with the agent noun in *tṛ* is not found in S.

[6] The desiderative adjectives ending in *-u* regularly govern the accusative; the desiderative noun in *ā* has been construed with the

the good' [5 25]; *śōkasya hartā śaraṇâgatānām*, 'the remover of sorrow of those that have taken refuge [in him]' [7. 5], cf. 1 45; 7. 31; *didṛkṣayākṣiptamanā munēs tu*, 'he, whose mind was diverted, for desiring a sight of the sage' [4 40]; *mahâughasyôttitīrṣayā*. 'out of a desire of crossing the great flood' [14. 16; cf. 14. 17].

The subjective genitive with past participles in *-ta*: 6. 40; 9. 11.

The absolute genitive does not occur in S.

### *The Locative*

The locative is a very living case in the Sāundarananda. The verbs which are construed with other oblique cases elsewhere are here construed with the locative Moreover, it is used with a great number of substantives and adjectives in various case-ideas.

The locative with verbs: *vṛt*: *avartista ca vṛddhēsu nâvṛtad garhitē pathi* 'he was under [the guidance of] the aged: he never took to the wrong path' [2. 26]; 3. 40; 9. 43; *pra vṛt*· *anukūlam pravartantē jñātiṣu jñātayō yadā*, 'when the kinsmen deal favourably with [their] kinsmen' [15 37]; *pra-mad*: *kāmēsv ajasram pramamāda nandah*. 'Nanda plunged deep in [sensual] pleasures' [2 63]; *vi-mad*: *niśāvihāsēṣu cirād vimādyati*, 'for long one exults in nocturnal revelries' [9. 30]; *nam*·[1] *munayē nanāma sa gurāv iva*, 'he [the king] bowed to the sage, as if to the superior' [3. 27]; *pra-nam*:[2] *praṇamya ca gurāu mūrddhnā*, 'bowing with the head to the superior' [12. 12]; *mahāmunāu bhaktivaśāt pranēmuḥ*, 'bowed to the great sage out of reverence' [5. 1]; *sarvēna bhāvēna gurāu pranamya*, 'with all feeling bowing to the superior' [17. 1]; *praṇāmaṃ kṛ*: *kartuṃ gamiṣyāmi gurāu praṇāmam*, 'I shall go to do homage to the master' [4. 32]; *jñā* (desiderative): *jijñāsamānā nāgēṣu kāuśalam śvāpadēsu ca*, 'seeking skill with the elephants and the [wild] animals' [1 36]; *vi-smi*: *śrīprāptāu na viṣismiyē*, 'did not rejoice at finding fortune' [2. 2]; *vi-ni-yōjay*: *yasmād aham tvām viniyōjayāmi śivē śucāu vartmani vipriyē 'pi*, 'as I engage you in the auspicious and pure, though distasteful, path' [5. 46]; *car*: *viṣayēṣu caran*, 'enjoying the objects' [14. 39];

> *guṇavatsu caranti bhartṛvat guṇahīnēsu caranti śatruvat* |
> *dhanavatsu caranti tṛṣṇayā dhanahīnēṣu caranty*
> *avajñayā*, ||

---

accusative only once, viz., *prayiyāsā gṛham ēva yāna mē*, 'because of my desire of going home' [8. 13].

[1] See under the dative, *supra*

[2] The dative is an alternative idiom here; see *supra*.

'[Women] play the master over the virtuous; they play the enemy over those who lack virtues: they deal thirstily with the rich; they deal spurningly with the poor' [8. 40].

*ram*: *kugrhē..ramatē*, 'finds pleasure..in a bad house' [9. 37][1]; 6. 47, 9. 44, 45; 8. 12; *tvad-dharmē paramē ramē*, 'I rejoice in the supreme *dharma* of yours' [12 16]; *śra-dhā*: *nârthī yady agninā na syāc chraddadhyāt tu na vâraṇāu*, 'one would not have believed in the fire-stick if he had no need of fire' [12 34]; *ā-śaṅk*: *ity evam-ādi priyavíprayuktā priyē 'nyad āśaṅkya ca sā jagāda*, 'thus the lady separated from [her] husband, suspecting him for something else, spoke thus' [6. 20]; *abhi-han*: *vajrēna hintāla ivâbhijaghnē*, 'smote like the thunder on a *hintāla* tree' [7 39], *kṛ*: *vadhūr gṛhē sâpi tavâ nukurvatī kariṣyatī striṣu virāgiṇīh kathāh*, 'she, the daughter-in-law, too, emulating you, would talk to the ladies on the topics of renunciation' [18. 59], *vi śvas*: *kas tasmin viśvasēt*, 'who would believe in him?' [15. 59]; *ghṛṇāya*, 'to feel abhorrence':

> *dṛṣṭv aikam rūpam anyô hi rajyatē 'nyah prahṛṣyati* |
> *kaścid bhavati madhyasthas tatrâivâ 'nyo ghṛnāyatē* ||

'On seeing a form one is attracted, another is charmed; but another feels abhorrence in the very same' [13. 52].

The locative with substantives[2]: *āruruksā*: *śivē katham tē pathi nâruruksā*· 'why [you have] no desire of taking the auspicious road?' [5. 40], *didrksā*: *didrksâsya munāu babhūva*, 'he had desire for having a look at the sage' [18. 2]; *asīt purastāt tvayi mē didrksā*, 'at first I had the desire of having a look at you' [18 33]; *pravivaksā*: *ata eva ca mē viśēsatah pravivaksā..tvayi*, 'so [I have] a special desire of speaking to you' [8 11]; *vivaksita*: *atô 'sti bhūyas tvayi mē vivaksitam*, 'so [I have] a desire of speaking to you again' [18. 53]; *saṅga*, 'company': *saṅgam ēti janē janah*, 'man finds company of man' [15 39]; *abhimāna*, 'pride'· *balē 'bhimānas tava kēna hētunā*, 'why this your pride of strength?' [9. 7]; *balasthatā*: *balasthatām ātmani yēna manyasē*, 'as you think of possessing strength in yourself' [9 6]; *pratijñā*: *ṛsyāmy anāśyāna-viśē-sakāyam tvayîti kṛtvā mayi tām pratijñām*, 'having made this promise to me, "I shall come back before your decorative paints are dried"' [6. 13]; *mōgha-sāntva*: *tathā hi kṛtvā mayi mōgha-sāntvam*, 'so giving me a bluff consolation' [6. 16]; *śraddadhānatā*, 'faith, trust': *śrēyasi śraddadhānatā*, 'faith in the good' [12. 30]; *prasāda*: *bhūyah prasādam ca gurāv iyāya*, 'became again well-disposed to the master' [17. 30]; *munāu prasādam yadi tasya hi syāt*, 'if he had been well-disposed to the

[1] The instrumental is an alternative idiom here; see *supra*.

[2] From the Old Indo-Aryan stage the locative with substantives was often an alternative idiom for the possessive genitive.

sage' [6. 17]; *balâbala*: *balâbalē câtmani sampradhārya kāryaḥ prayatnaḥ na tu tad-viruddhaḥ*, 'having realised (your) own strength and weakness, trial is to be made, and not its opposite' [16. 52]; *mūla*, 'source': *vīryam param kārya-kṛtāu hi mūlam*, 'prowess is the supreme source of a successful deed' [16. 94]; *apadeśa*, 'pretext': *bhaktiṃ sa buddham prati yām avôcat tasya prayātum mayi sô 'padeśaḥ*, 'the reverence which he professed for the Buddha is only his pretext [shown] to me for going away' [6. 17]; *anuvṛtti*: *kva cânuvṛttir mayi sâsya pūrvam tyāgaḥ kva câyam janavat kṣaṇēna*, 'where is that obeying me [as] of old and where is this escape like the [common] people' [6. 19]; *dōṣa*: *mā svāminam svāmini dōṣam āgāḥ*, 'do not ascribe to the master the offence [which are generally committed by] the husband' [6 22]; *pravṛtti* 'news': *śrutvā tatô bhartari tām pravṛttim*, 'then on hearing that news of [her] husband' [6 24]; *śōka*: *rājarṣi-vadhvās tava nânurūpô dharmaśritē bhartari jātu śōkaḥ*, 'it is not meet for you, the wife of the royal sage, to mourn for the husband' [6. 39]; *rāga*, 'attachment'. *tvayi yaś ca rāgaḥ*, 'that attachment for you' [6. 47]; *hitâiṣita*: *adhṛtāu yadi yam hitāiṣitā mayi tē syāt*, 'if you have good wishes for me in [my] disconsolateness' [8. 10]; *hṛdaya*: *katham arhati tāsu paṇḍitô hṛdayam sañjayitum calâtmasu*, 'how can the wise care to win the heart of the fickle-minded?' [8. 46]; *icchā*: *tathā tathêcchā viṣayēṣu vardhatē*, 'so and so does increase the desire for the objects [of the senses]' [9 43]; *dhṛti*: *parām dhṛtim parama-munāu cakāra saḥ*, 'he had supreme reliance on the great sage' [10. 64].

The locative with adjectives: *śrānta*: *babhūva tapasi śrāntaḥ kākṣivāniva gōtamaḥ*, 'he became hard-worked in austerities like Gōtama, Kākṣīvant' [1. 1]; *tasthivāms*: *tasthuṣaḥ satsu karmasu*, 'of him practising the six practices' [1. 44]; *sthita*: *sthitaḥ kārtayugē dharmē*, 'practising the *dharma* of the *kṛta* age' [2. 25]; *akutūhala*: *viṣayēsv akutūhalaḥ*, 'indifferent to the objects [of the senses]' [2. 25]; *anukampaka*: *ity ēvam uktaḥ sa tathâgatēna sarvēsu bhūtēṣv anukampakēna*, 'he being thus told by the Tathāgata who sympathised with all beings' [5 33]; *samartha*: *yāvad vayô yōgavidhāu samartham buddhiṃ kuru śrēyasi tāvad ēva*, 'as long as the age is capable of the practices of *yōga*, so long do you make up your mind for [acquiring] the good' [5. 49]; *vācya*: *nikhilēna ca satyam ucyatām yadi vācyam mayi sāumya manyasē*, 'do speak the entire truth, if you, O child, think it [proper] to communicate to me' [8. 6], *satṛṣṇa*: *kāmēṣu hi satṛṣṇasya na śāntir upapadyatē*, 'peace does not come to him who is athirst of sensual pleasures' [11. 37]; *āgata*: *ātmani duḥkham āgatam*, 'pain [that has) come to oneself' [9. 41]; *kuśala*: *kāma-caryāsu kuśalaḥ*, 'experienced in amorous activities' [11. 4]; *viklava*: *bhikṣucaryāsu viklavaḥ*, 'averse to the duties of a *bhikṣu*' [11. 4]; *jāta*: *yaj jñātvā tvayi jātam mē hāsyam kāruṇyam*

*ēva ca*, 'knowing which my laughter and pity have been excited for you' [11 23]; *atrpta · trptir nāstīndhanāir agnēh nāpi kāmēsu atrptasya*, 'fire has no satiety with fuels.. nor of one unsatiated with sensual pleasures' [11. 32]

Note the following example:

*adadatsu bhavanti narmadāh pradadatsu praviśanti vibhramam |*
*pranatēsu bhavanti garvitāh pramadās trptatarāś ca kāmisu ||*

'Women become entertaining to those who do not pay: they adopt coquetry towards those who pay; they become haughty towards those who submit to them; and they become very satisfied with the amorous' [8. 39].

The causal locative. *tad-vrddhāu vardhatē dharmo mūla-vrddhāu yathā drumah*, 'the *dharma* thrives with the thriving of faith, just as a tree thrives with the growth of its roots' [12. 41]

## 2. Compound Forms

The compounds in S, rarely exceed four component words. The following compounds are peculiar · *vēda vēdānga-vidvāms-*, 'versed-in-the-vedas-and-the-supplementary-vedic-literature' [1 44]; *bhāryā-didrksu-*[1], 'desirous-of-seeing-the-wife' [10 1]; *yatrēccha* (adverbial compound), 'at-will-where': *yathēccham yatrēccham samayati manah prērayati ca*, 'howsoever and wheresoever at will he can check or direct his mind' [15. 69]; *alamvidya-*, 'well-educated' [1. 48]; *alam-vīrya*, 'very heroic' [1. 55].

## 3 The Verb

One of the most striking characteristics of the style of Aśvaghōsa is the excessive use of finite verbs. This is a great contrast with the style of the classical poets not excluding Kālidāsa.

### *The Tenses*

The perfect is the regular tense for denoting the past It occurs 460 times. and with 108 verbs. The aorist occurs 118 times, and with 61 verbs. The imperfect occurs with 19 verbs and 38 times. The ratio between the perfect and the aorist is a little less than 4 . 1, between the aorist and the imperfect about 3 : 1. In the Buddhacarita, however, the ratio between the perfect and the aorist is about 19 : 1.

The periphrastic future occurs only once, viz., *kartâsmi*

[1] Notwithstanding the absence of Pānini's sanction for such a compound, we do find such compounds in classical Sanskrit, *e.g.*, *arthalipsu* 'desirous-of-getting-money' [Pañcatantra], etc.

*sarvam bhagavan vacas tē*, 'I shall do, O Lord, all that you say' [5. 50].

*The Moods*

The optative is used for the conditional here:

> *tām sundarīm cēn na labhēta nandaḥ*
> *sā vā niṣēvēta na tam natabhrūḥ* |
> *dvandvam dhruvam tad vikalam na śobhētā-*
> *nyō-' nyahīnāv iva rāti-candrāu* ||

'If Nanda had not married that beautiful lady, and if that arch-browed girl had not served him, then certainly the couple, separated, would not have looked fine like the night and the moon bereft of each other' [4. 7].

In the following verse the optative denotes the past tense:

> *sā tēna cēṣṭālalitēna bhartuḥ*
> *śāṭhyēna cāntarmanasā jahāsa* |
> *bhavēc ca ruṣṭā kila nāma tasmāi*
> *lalāṭajihmām bhrukuṭim cakāra* ||

'She laughed within herself at that graceful misbehaviour of her husband. she feigned to be angry with him, and accordingly, made a frown twitching the forehead' [4. 15].

The passive imperative is found in 8. 4. 6; 13 22, etc.

The conditional occurs only once: *hatō' bhaviṣyam yadi na vyamōkṣam*, 'I would have perished if I had not attained the spiritual release' [18. 41].

*The Participle*

The perfect participle is used both as an adjective as well as a finite verb. Thus (i) as adjective: *śōkēna cōnmādam upēyivāmsō rājarṣayō 'nyē 'py avaśā vicēluḥ*, 'even royal sages, having attained madness owing to sorrow, have lost their balance of mind' [5. 29], cf. 3 22; (ii) as finite verb: *akṛtârthō na dadṛśē yō' sya darśanam īyivān*, 'no one who ever saw him did look unsatisfied' [2 8]; *yam ēkabāṇēna nijaghnivān* (sic) *jarā*, 'whom old age smote with a single shaft' [9. 18]: *sunētraḥ punarāvṛttō garbhavāsam upēyivān*, 'Sunetra again came to reside in the womb (*i.e.*, was born again)' [11. 57]; *bhṛśam samvēgam īyivān*, 'was very much perturbed at heart' [12. 4].

The past participles are generally used with a finite verb meaning 'to be': *katham kṛtō' si*, 'how could you do it?' [7. 18];

> *dvāipāyanō dharmaprāyaṇaś ca*
> *rēmē samam kāśiṣu vēśavadhvā* |
> *yayā hatō 'bhūc calanūpurēṇa*
> *pādēna vidyullatayēva mēghaḥ* ||

'Dvāipāyana, though a spiritual man, enjoyed a *hetaera* at the Kāśis; and by whom he was killed with her foot adorned with the jingling anklets like a cloud smitten with the streak of lightning' [7. 30]; 9. 9, 16; 14. 45; 17. 66; *punar api casmi sannatas tam*, 'I again bow to him' [17. 73] Sometimes the finite verb is not used: *aham hi daṣṭō hṛdi manmathāhinā*, 'I am really bitten at heart by the Love-serpent' [10 55]; *gurur gṛham nô bhagavān praviṣṭaḥ*, 'our lord the master has entered the house' [4. 30].

In the Sāundarananda not a single instance occurs where the present participle (the possessive past participle ending in *-ta-vant*) It is either used as an attributive adjective, or as a predicative adjective with a finite form of the root *as*. Thus:

*śyēnāya prāṇivātsalyāt sva-māmsāny api dattavān |*
*śivih svargāt paribhraṣṭas tvādṛk kṛtvāpi duṣkaram ||*

'Śivi, who gave his own flesh to the Syēna out of mercy to the creatures, and having done such a feat, was ejected from the heaven' [11. 42]; cf *prāptavān* in 11 60; *viṣayāms, tyaktavān asi*, 'you have given up the [enjoyment of the] objects' [11. 27]; *yady api pratisamkhyānāt kāmān utsṛṣṭavān asi*, 'as you have given up sensual pleasures for the sake of contemplation' [15. 4].

*The Conjunctive*

The conjunctive has sometimes been used ungrammatically (i e. not having the same subject as the finite verb as prescribed by Pāṇini), as is found in the Great Epic as well as in late classical Sanskrit.[1] Thus *jñātimś ca dṛṣṭvā vratinō gṛhasthān samvin na citte 'sti na vāsti cētaḥ*, 'seeing (your) kinsmen as religious mendicants, who were formerly house-holders, does it not provoke your thought?—or, have you no heart?' [5. 37]; *bhūyaḥ samālōkya gṛhēṣu dōṣān niśāmya tat tyāgakṛtam ca dharma | nâivâsti bhōktum matir ālayam tē*, 'having repeatedly noticed and found fault with the home life, and having learnt that *dharma* of renunciation, you have no desire of enjoying comforts at home' [5. 39];

*śrutvā hṛdāvartakam svargam samsārasya ca citratām |*
*na martyēṣu na dēvēṣu pravṛttir mama rocatē ||*

'After hearing the impermanence of heaven and the unstability of the world, I have no inclination for either men or for gods' [12. 14];

*dōṣavyālān atikramya vyālān gṛhagatān iva |*
*kṣāmam prājñasya na svaptum nistitīrṣōr mahad bhayam ||*

[1] The Buddhacarita too abounds in such ungrammatically used conjunctives.

'Disregarding the defects that are like ferocious animals that are at home, it is not meet to sleep for the wise one who is desirous of escaping a great fear' [14. 29];

*kāyasya kṛtvā hi vivēkam ādāu sukhō 'dhigantuṃ manasō vivēkaḥ*, 'having at first attained physical indifference, it is easy to come to mental indifference' [14. 46].

The conjunctive used absolutely with *kim*[1]: *kim indriyāṇām upagamya dāsyam*, 'what is the good of serving the senses?' [5. 25]; *kim indriyārthārtham anartham ūḍhvā*, 'what is the good of carrying misfortune for the sake of the objects of the senses?' [5 26]

*The Infinitive*

The infinitive has been faultly used in: *sukhō'dhigantum manasō vivēkaḥ*, 'it is easy to attain mental aloofness' [14. 46]; *tasya prayātum mayi sō 'padēśaḥ*, 'that is a plea (offered) to me for his leaving (me)' [6 17].

## 4. The Vocabulary

The most striking feature of the vocabulary of Aśvaghōṣa is his excessive use of the desiderative formations. The following desideratives occur in S,—

Substantives *ditsā*, 'desire of giving' [2. 5]; *bubhutsā*; 'desire of knowing' [3. 6]; *jigīsā*, 'desire of winning' [5 32]; *anujighṛkṣā*, 'desire of doing a favour' [3. 15]; *anujighṛkṣutā*, the same [18 47]; *vininīṣā*, 'desire of training' [3. 21]; *didṛkṣā*, 'desire of seeing' [4. 40; 18 2, 33]; *ārurukṣā*, 'desire of mounting' [5. 40]; *pravivakṣā*, 'desire of speaking' [8. 11]; *vivakṣā*, the same [11. 18]; *prayiyāsā*, 'desire of going' [8. 13]; *jighāṃsā*, 'desire of slaying' [11. 18]; *titādayiṣā*, 'desire of driving out' [11. 25]; *īpsā*, 'desire of getting' [11 28]; *lipsā*, 'desire of gaining' [11. 26]; *riraṃsā*, 'desire of abstaining' [11. 34]; *titīrṣā*, 'desire of fording' [14 17]: *uttitīrṣā*, the same [14 16]; *nirmumukṣā*, 'desire of escaping' [16. 25]; *cikīrṣita*, 'desire of doing' [8. 9].

Adjectives: *yiyāsu*, 'desirous of going' [2. 6, etc.]; *didṛkṣu*, 'desirous of seeing' [2. 46, etc]; *śiśayiṣu*, 'desirous of lying on' [3. 22]; *vivakṣu*, 'desirous of speaking' [4. 29, etc.]; *nirmumukṣu*, 'desirous of emancipation' [5 5]; *mumūrṣu*, 'desirous of dying' [5. 39]; *ujjihīrṣu*, 'desirous of taking out' [5. 47, etc.]; *jijīviṣu*, 'desirous of living' [6. 23]; *pravivakṣu*, 'desirous of saying' [8. 7]; *pravivikṣu*, 'desirous of entering' [8. 16, etc.]; *utsisṛkṣu*, 'desirous of giving up,' *vivikṣu*, 'desirous of entering, *abhyujjihīrṣu*, 'desirous of rescuing' [10. 1]; *pipāsu*, 'desirous of drinking' [10. 11, etc]; *jighāṃsu*, 'desirous of destroying'

[1] Cf. Pāṇini's aphorism, *alaṃkhalvōḥ pratiṣēdhayōḥ prācāṃ ktā* [3. 4. 18].

[10. 43, etc.]; *didhakṣu*, 'desirous of burning' [10 53]; *mumukṣu*, 'desirous of escaping' [14. 11, etc.]; *pipatiṣu*, 'desirous of falling' [14. 15]; *nistitīrṣu*, 'desirous of escaping' [14. 29]; *jijāgariṣu*, 'desirous of keeping awake' [14. 24]; *cikīrṣu*, 'desirous of doing' [17. 5]; *yuyutsu*, 'desirous of fighting' [17. 23]; *jigīṣu*, 'desirous of victory' [17 56]; *vimumukṣu*, 'desirous of escaping' [18. 13]; *vivatsu*, 'desirous of dwelling' [1. 18].

Finite Verbs: *praviviksati*, 'he wishes to enter' [8. 15]; *titīrṣati*, 'he wishes to cross over or escape' [8. 17]; *jighṛkṣati*, 'he wishes to take' [8 18]; *titīrṣēt* 'should cross over' [9 10]; *abhilipsasē*, 'you desire to get' [10. 63]; *cikrīsanti* (sic) 'they wish to buy' [11. 26]; *cikitsayēt*, 'he should wish to cure' [13. 55].

Conjunctives and participles: *cikitsayitvā*, see *supra* [4. 14]; *jighṛkṣant*, see *supra* [5 5]; *ujjihīrṣant*, see *supra* [5. 18]; *jihīrṣant* [5. 34, etc ], *anīpsamānā*, 'not desirous of getting' [6. 6]; *īpsant* [6 23]; *īpsita* [9 41]; *ditsant*, 'desirous of giving' [10 10], *mumurṣant* [11 51] *cikīrṣita* 'desired' [12. 26]; *jigīṣant*, see *supra* [16 85], *cikīrṣant*, see *supra* [17. 5]; *vivakṣita*, 'desired to be spoken' [18 53].

*Adnominal verbs*

*karuṇāyamāna*, 'feeling pity' [5 21, [this word occurs twice in B. and no other adnominal verb occurs there]; *vahnāyatē*, 'it resembles a big fire' [10 8], *rājāyatē* 'he behaves like a king' [10 26]; *mandāyamāna*, 'getting dull' [16. 56]; *ghṛṇāyatē*, 'feels abhorrence' [13. 52]

The only intensive is—*cankramyasva*, 'walk on and on' [14. 25]

In S. as well as in B. the regular name of the Himalayas is the old word *himavant*, and only once, *himagiri* The late form *himālaya* which occurs in the Kumāra-sambhava of Kālidāsa does not occur in the works of Aśvaghōsa.

The following are the rare and peculiar words that occur in the Sāundarananda: *arharūpa*, 'deserving' [1. 20], *tarṣa*, 'thirst, longing' [2 19, etc ]; *kathamkathā*, 'anxiety' [2. 32; 3. 39]; *akathamkatha*, 'not anxious' [17. 27], *ladita*, *ladant*, 'beautiful' [4 27, 22. 40, 6 43 etc ], *vinākṛta*, 'separated' [8. 20]; *śraddadhānatā*, 'faith' [12 30]; *cāukṣa*, 'fine, clever' [13. 16]; *nandī*, 'pleasure, happiness' [16 44. 45]; *kaluṣa*, 'sin' [16. 76]; *vibhī*, 'afraid' [17. 61].

REPETITIONS

In the Sāundarananda the same phrases and idioms often occur repeatedly. These are the repetitions

*mukhēna sācīkṛtakuṇḍalēna*, 'with the face having the ear-rings awry' [4. 19]; *mukhēna tiryan-natakuṇḍalēna*, 'with the face having the earring bent sideways and downwards' [6. 2].

*ivâbabhāsē*, '(it) appeared like..' [5. 52, 53; 10. 8; 17. 61].

*giram ity uvāca*, 'uttered this speech' [6. 20; 10. 47].

*yayuś ca yāsyanti ca yānti câiva*, 'they did go (in the past), shall go (in the future), and they go (even now)' [5. 43]; *cakruh karisyanti ca kurvatē ca*, 'they did do, they shall do, they do (even now)' [7. 13]; *cēruś carisyanti caranti câiva*, 'they did, shall do, and (even now) do practise [austerities]' [7. 13].

*vilalāpa tat-tat* 'she wailed so and so' [6 12; 7. 12].

*krtāñjalir vākyam uvāca nandah*, 'Nanda spoke with his palms folded' [10. 49; 18. 39].

*na câtra citram yadi*, 'there is nothing strange here if..' [9. 3]; *kim atra citram yadi*, 'what is strange here if .' [16. 84]

*rājeva laksmīm ajitām jigīsuh*, 'like a king wishing to win the fortune not yet won' [16. 85]; *rājeva dēśān ajitān jigīsan*, 'like a king wishing to conquer the country hitherto unconquered' [17. 56].

*madanâikakāryu*, 'solely addicted to the pleasures of love' [4. 1, 10 35].

## THE RHYMED VERSE

It is an interesting fact to note that the rhymed verse occurs in S. The earliest occurrence of the rhymed verse is to be found in the Mahābhārata and also in the Rāmāyaṇa. In late classical Sanskrit we find such verses very occasionally, as in the verses ascribed to Ghatakarpara Rhymed verses written in Apabhraṃśa are to be found in the interpolated verses in Kālidāsa's Vikramôrvaśī.

These are the rhymed verses and half-verses that occur in the Saundarananda:

> *sā rōdanârōsitaraktadṛstih*
> *santāpasamksōbhitagātrayastih* |
> *papāta śīrṇâkulahārayastih*
> *phalâtibhārād iva cūtayastih* ||

'Her eyes slightly reddened with weeping, her slim body surging with sorrow, her necklace disturbed, she a slight figure, fell down like a mango tree under the excessive load of its fruits' [6. 25].

> *darīcarīṇām atisundarīṇām*
> *manôharaśrōṇi-kucôdarīṇām* |
> *vṛndāni rējur diśi kinnarīṇām*
> *puṣpôtkirāṇām iva vallarīṇām* ||

'The groups of Kinnarīs who dwell in caves, who are exceedingly beautiful, who have lovely hips, breasts, and waists, appeared charming like creepers that have put on blossoms' [10. 13].

*tāu dēvadārūttamagandhavantam*
*nadīsarahprasravanāughavantam* |
*ājagmatuḥ kañcana dhātumantam*
*dēvarṣimantam himavantam āśu* ||

'They two came to a certain part of the Himalayas, that was sweetly perfumed with the Deodar trees, that contained rivers, lakes, and springs, that was full of metal ores, and that was inhabited by the gods and sages' [10 5].

The last line of this verse does not rhyme Perhaps metrical difficulty was on the way

*sa duhkhajālān mahatō mumukṣur*
*vimōkṣamārgādhigamē vivikṣuh* |
*panthānam āryam paramam didrkṣuh*
*śamam yayāu kiñcid upāttacakṣuh* ||

'He who was desirous of escaping from the great net of pain, of entering into the way to emancipation, and of finding the supreme path of righteousness, became somewhat calm endowed as he was with (spiritual) insight' [17. 13].

*sadvrttavarmā kila sōmavarmā*
*cacāla cittōdbhavabhinnadharmā* |

'Somavarman, his good deeds being his armour, roamed about, his piety being (after all) shattered by love that grows in the heart' [7 42].

*calatkadambē himavannitambē*
*tarāu pralambē camarō lalambē* |

'On the slopes of the Himalayas, where the *kadamba* flowers quivered, on the dangling branches of the tree, the yak wandered about' [10 11].

The rhymed verse occurs also in B. [1. 14. 15, 2. 40; 4. 27. 30; etc.]

THE METRE

Metrical defects are to be found in 4 7 *cd* and 7. 37 *cd*, where c does not end in a word but carries the last syllable to the next foot.

The verses in the Sāundarananda number 1 063. Fifteen metres have been used in the poem These are as follow:

(i) *Samavrtta*

Śloka [8 syllables]—384 verses
Upajāti [11]—459 verses,
Vaṃśastha [12]—78 verses,
Praharṣiṇī [13]—4 verses,
Rucirā [13]—1 verse,
Vasantatilaka [14]—10 verses,
*A new metre* [14]—2 verses (see *infra*).

Śikharinī [17]—10 verses,
Kusumitalatāvellita [18]—1 verse,
Śārdūlavikrīḍita [19]—6 verses,
Suvadanā [20]—2 verses.
(ii) *Arddhasamavṛtta*
Puṣpitāgrā—4 verses,
*A new metre*[1]—1 verse,
Sundarī—57 verses.
(iii) *Viṣamavṛtta*—44 verses.

The metre Mandākrāntā does not occur in S. nor in B. nor in the dramatic fragments ascribed to Aśvaghōṣa. It seems exceedingly likely that Kālidāsa was the originator of the Mandākranta metre. The earliest occurrence of this metre is found in the posthumous Allahabad pillar inscription of Samudragupta. Hariṣēna, the author of this inscription, might have been a contemporary of Kalidāsa. That Kālidāsa did not know this inscription can be argued from the fact that he did not use this metre either in the Ṛtusaṃhāra or in the Kumārasambhava. Had he known this inscription, and for the matter of that the metre Mandākrāntā, it could be expected of him to have used this—one of the most majestic of metres in Sanskrit—at least in the Kumārasambhava which bears all the impress of careful work in which the poet sought to give his vent It is possible that Kālidāsa invented it when writing the Mālavikâgnimitra, as the Mandākrāntā verses occurring there are not very smooth and have the impress of a halting first attempt. It became gradually smoother and freer, successively in the Vikramôrvasī, the Abhijñānaśakuntala, the Raghuvaṃśa, and probably finally in the Meghadūta.

In the Sāundarananda are found two metres which have the cadence of the Mandākrāntā, and which therefore might in all likelihood have suggested the metre to Kālidāsa : the priority in date of Aśvaghōṣa to Kālidāsa, and the latter having read and having been influenced by the former should be considered These metres are as follow :

[i] The verse 7 52 [the metre of this verse has been named Kusumitalatāvōllita in the *Chandômañjarī* of Gaṅgādāsasūri[2]

[1] The verse is this :
— ◡ — ◡ — ◡ — ◡ — ◡ — ◡ — ◡ —
*kāmabhōgabhōgavadbhir ātmadṛṣṭidṛṣṭibhiḥ*
◡ — ◡ — ◡ — ◡ — ◡ — ◡ — ◡ — ◡ —
*pramādanāikamūrdhabhiḥ praharṣalōlajihvakāiḥ* |
*indriyōragāir manōvilāśrayāiḥ spṛhāviṣāiḥ*
*śamāgamād ṛtē na daṣṭam api yac cikitsayēt* || [13.55].
Lines *a* and *c* are Tūṇaka lines; cf. editor's note, pp. 135, 136.

[2] Edited by Rāmatārāṇa Śirômani, Calcutta, 1909, p. 69.

**but does not occur in extant Kāvya literature]—this is a Mandākrāntā verse with an initial heavy syllable :**

> ***tasmād bhikṣârtham mama gurur itô yāvad ēva prayātaḥ***
> ***tyaktvā kāṣāyam gṛham aham itas tāvad ēva prayāsyē |***
> ***pūjyam liṅgam hi skhalitamanasô bibhrataḥ kliṣṭabuddhēr***
> ***nâmutrârthâḥ syād upahatamatēr nāpy ayaṃ jīvalōkaḥ ||***

The scheme is this—

— | — — — | - - ◡ ◡ | ◡ ◡ ◡ | — — ◡ | — — ◡ | — —,

the scheme of the Mandākrāntā being—

— — — | — ◡ ◡ | ◡ ◡ ◡ | — — ◡ | — — ◡ | — —.

[II] The verses 12. 43, 13. 56—[the metre of these verses also seems to be unknown in Sanskrit literature ; it is one of the three new metres which I have not noticed elsewhere in Sanskrit]—this metre is the Mandākrānta lacking three syllables at the end, one short and two heavy—

> *tasmād ēṣām akuśalakarāṇām arīṇām*
> *cakṣurghrāṇaśravaṇaṃ asanāsparśanānām |*
> *sarvâvasthaṃ bhavati niyamād apramattô*
> *māsminn arthē kṣaṇam api kṛthās tvam pramādam ||*
>
> [13. 56].

The scheme of this metre is—

— — — | — ◡ ◡ | ◡ ◡ ◡ | — — ◡ | — —;

compare the scheme of the Mandākrānta—

— — — | — ◡ ◡ | ◡ ◡ ◡ | — — ◡ | — — ◡ | — —.

## Interpolation in the Brahma Sūtraṃ

By M. M. CHATTERJI

There are three sūtras or aphorisms in the *Brahma Sūtraṃ*, dealing with the question of food. The first of the trinity is:

सर्वान्नानुमतिश्च प्राणात्यये तद्दर्शनात् ।[1]

Adhyāya III, Pāda 4, Sūtra 28

In the commentary, ascribed to Sankaracārya, this aphorism is based on the two Upaniṣadic texts quoted below:—

न ह वा एवं विदि किंचनानन्नं भवतीति ।[2]

*Chāndogya* Up, V. 1. 2

The other text is as follows:—

न ह वा अस्यानन्नं जग्धं भवति नानन्नं प्रतिगृहीतम् ।[3]

*Bṛhadāranyaka* Up., VI. 1, 14.

Both texts unite in teaching that the universal life or breath eats all that is eaten by any individual. He who realises the identity in substance of his life with the universal life does so in thought alone There is no injunction or permission concerning propriety of food applicable to individuals. This the commentary points out and adds that assuming such permission its operation is to be restricted to risks of death In support of this view the commentary cites an Ākhyāyikā or story from the Chāndogya Upaniṣad. It relates that the sage Cākrāyaṇa ate forbidden food during a season of famine

The commentator's application of the story to the aphorism under consideration appears to violate a prior aphorism (III, 4. 24) which limits the use of a story to the illustration of the

---

1 And there is permission of all food, (only) in the case of danger of life, this is shown by scripture. *Sacred Books of the East*, Vol XXXVIII, p. 309.

2 To the realiser of this (i.e., unity in substance of his own breath, vitality, or life with the Divine energy, which is manifest as the life in all) nothing that can be eaten is no-food (i.e., prohibited) (The translation follows Śankara.)

3 He who thus knows the food of Ana (the breath) by him nothing is eaten that is not (proper) food, nothing is received that is not (proper) food. *Sacred Books of the East*, XV, p. 204.

proximate vidyā or sacred science. The prior aphorism referred to is as follows :—

तथा चैकवाक्यतोपबन्धात् ।[1]

Besides, each of the two texts cited in the commentary relates to Prāṇopāsana or devotion with life as a symbol (*pratika*) while the Cākrāyaṇa story is illustrative of Udgithavidyā where the symbol is the sacred syllable Oṃ. The confused application, noticeable in the commentary, is an exegetical wrong[2]

The next aphorism with its short commentary is given below :—

अबाधाच्च ।

एवं च सति "आहारशुद्धौ सत्त्वशुद्धिः" इत्येवमादिभक्ष्याभक्ष्य-विभागशास्त्रमबाधितं भविष्यति ।[3]

It will be observed that the word "आहार" is here taken to mean "food" while in the text itself the word is explained by Saṅkara in his commentary, thus :—

आह्रियते इत्याहारः शब्दादि विषयज्ञानं भक्तुर्भोगाय आह्रियते ।[4]

It is clear that according to Saṅkara purity of mind, by detachment from all egotistic regard for objects of sense generally is indicated by the words quoted from the text, without any special reference to selection of food. The reference really is to the mental condition in contact with objects of sense and not to objects of sense as such. All lurking doubts will be dispelled by the words that immediately follow the above :—

तस्य विषयोपलब्धिलक्षणस्य विज्ञानस्य शुद्धिराहारशुद्धिः, राग-द्वेषमोहदोषैरसंस्पृष्टं विषयविज्ञानमित्यर्थः ।[5]

---

1 This follows also from the connexion (of the stories with the vidyās) in one coherent whole *S.B.E.*, Vol XXXVIII, p. 305

2 For commentary *in extenso* with translation see Appendix.

3 And on account of the non-sublation —III, 4, 29

And thus those scriptural passages which distinguish lawful and unlawful food,—such as Ch Up. VII, 26, 2, "When food is pure all nature is pure."—are not sublated *S.B.E.*, XXXVIII, p 311.

4 (What one) collects is आहार: or collection Perception of sound and the rest is collected for the experience of the percepient.

5 The purity of that perception which is indicated by the knowledge of that (i.e., sound and other objects of sense) is the purity of आहार. The (true) meaning is that the perception of objects (shall be) untouched by attraction, repulsion, or confusion (of mind).

Śaṅkara, if the author of both the commentaries, must be found guilty of palpable self-contradiction, of which, one may make bold to assert, no other instance can be discerned by the most lynx-sighted critic. It would be in place here to notice the commentator's alternative interpretation of the texts cited connected, as it is, with the next aphorism and its commentary. The alternative interpretation is stated in the first place as glorification of one who assimilates the teachings of the two Upanisadic texts referred to in the commentary उत स्तुत्यर्थं सङ्कीर्तित इति (literally, "or declared for glorification definitely"). This is confirmed in the conclusion thus:—तस्मादर्थवादः (therefore figurative expressions of praise or अर्थवाद) in the two texts referred to in the commentary and, as such, the texts are not to be literally understood This view is attempted to be strengthened by the next aphorism:—

अपि च स्मर्यते ।

The commentary is short enough to be quoted here:—

"अपि च" आपदि सर्वान्नभक्षणमपि "स्मर्यते" विदुषोऽविदुषश्चाविशेषेण ।

"जीवितात्ययमापन्नो योऽन्नमत्ति यतस्ततः ।
लिप्यते न स पापेन पद्मपत्रमिवाम्भसा" ॥ इति ।

तथा 'मद्यं नित्यं ब्राह्मणः ।' 'सुरापस्य ब्राह्मणस्योष्णामासिञ्चेयुः' 'सुरापाः कृमयो भवन्त्यभक्ष्यभक्षणात्' इति च स्मर्यते वर्जनमनन्नस्य ॥ [1]

The plea of glorification completely fails. As the Smṛti quoted applies to men generally and not to the master of the vidyā or sacred Science the Upanisads teach. What applies in the same degree to all cannot be taken to glorify any particular class or its particularity. Finally, it is to be noted that the commentary at the outset mentions the alternative as presenting a doubt to be removed before either is accepted But in the end it appears to accept both and in the next aphorism aid is invoked in support of the latter alternative, affirming glorification.

---

[1] And this is said in Smṛti also.

That in the cases of need both he who knows and he who does not know may eat any food Smṛti also states, compare, e.g., 'He who being in danger of his life eats food from anywhere is stained by sin no more than the lotus leaf by water.'—On the other hand, many passages teach that unlawful food is to be avoided. 'Intoxicating liquor the Brāhmana must permanently forego'; 'Let them pour boiling spirits down the throat of the Brāhmana who drinks spirits'; 'Spirit-drinking worms grow in the mouth of the spirit-drinking man, because he enjoys what is unlawful'.—*S.B.E.*, XXXVIII, p. 311.

The Bhagavad Gītā teaches with completeness about food and feeder. But it would be out of place to consider such teachings at length in the present connection. It would be sufficient to refer to one verse (XV. 14) and Śaṅkara's commentary thereon :—

अहं वैश्वानरो भूत्वा प्राणिनां देहमाश्रितः ।
प्राणापानसमायुक्तः पचाम्यन्नं चतुर्विधं ॥[1]

Śaṅkara's commentary on this verse runs as follows :—

किञ्च अहमिति। अहमेव वैश्वानर उदरस्थोऽग्निर्भूत्वा "अयमग्नि-र्वैश्वानरो योऽयमन्तःपुरुषे येनेदमन्नं पच्यते" इत्यादि श्रुतेर्वैश्वानरः सन् प्राणिनां प्राणवतां देहमाश्रितः प्रविष्टः प्राणापानसमायुक्तः प्राणापानाभ्या समायुक्तः संयुक्तं पचामि पक्तिं करोमि। अन्न चतुर्विधं चतुःप्रकारं भक्षणं भोज्यञ्च भक्ष्यचोष्यं लेह्यञ्च भोक्ता वैश्वानरोऽग्निर्भोज्यमन्नं सोम-स्तदेतदुभयमग्नीषोमौ सर्व्वमिति पश्यतोऽन्नदोषलेपो न भवति ॥ १४ ॥

Furthermore, "I" and so forth—I (*i.e.*, the Supreme) am the fire or energy in the digestive organ within creatures. According to the Upanisadic text "this fire is Vaiśvanara within individuals and by this food is digested and so forth"; "taking the form Vaiśvānara (and) entering into all living forms and united with upgoing and downgoing breath (*i.e.*, inspiration and expiration), performs digestion. The kinds of food here referred to are classified according as it is to be chewed, sucked, licked, or drunk. The feeder is the fire (or energy called) Vaiśvānara and the food is Soma (*universal* Sapor). To one who views this in its universal aspect no evil comes from food"

It is to be noted that Sankara does not base the verse of the Bhagavad Gītā on the authority of the Upanisadic texts referred to above. The text partly quoted in Sankara's commentary is Bṛhadāraṇyaka Upanisad (V. 9) which runs as follows :—

अयमग्निर्वैश्वानरो योऽयमन्तःपुरुषे येनेदमन्नं पच्यते यदिदमद्यते तस्यैष घोषो भवति यमेतत् कर्णावपिधाय शृणोति स यदोत्क्रमिष्यन् भवति नैनं घोषं शृणोति ।[2]

---

[1] I, becoming Vaiśvānara and entering into the bodies of living creatures, digest the four kinds of food, being joined with the upward and downward life-breath.

[2] Agni Vaiśvānara is the fire within man by which the food that is

The teaching declares to spiritual view or faith the sentient unity of the energy perceived as operative in fire or heat and air or breath whose combined action results in digestion of food of all kinds in all. Śaṅkara derives from it no rule of conduct.

In short, the text teaches that purity of mind depends on its attitude towards objects of sense and not on the character of the objects themselves.

It is to be observed that the text is silent as to any evil arising from use of food. The pronouncement on this point is Śaṅkara's own.

It is clear that neither the text nor the commentary draws any practical rule for the selection of food The teaching, when applied to conduct, will be effective in removing hate, contention, and strife including spiritual antipathy, based on the use of different kinds of food by peoples or individuals. The consideration of lawful food in Brāhmanism is outside the present purpose and it would be out of place to discuss Śankara's conclusion except to point out its complete disagreement with the three aphorisms above considered and the relative commentaries It is clear beyond the faintest doubt that to attribute the authorship of the commentaries to Śaṅkara is to destroy completely his authority as an exegetist owing to his glaring self-contradiction.

The above observations are submitted for authoritative judgment generally and specially on the following points, namely:—

(1) Was the trinity of Sūtras referred to known to Śaṅkara ?
(2) Was Śaṅkara the author of the commentaries thereon ?
(3) Were the Sūtras interpolated between the time of Śaṅkara (7th Century A.D.) and that of Rāmānuja (11th Century A.D.) who laid great stress on selection and consumption of food ?
(4) Was the object of such interpolation the preservation of cultural independence against Moslem doctors, notwithstanding spiritual unity ?

---

eaten is cooked, i.e., digested. Its noise is that one hears if one covers one's ears when he is on the point of departing this life. He does not hear that noise. *S.B E.*, XV, p. 193.

APPENDIX

सर्व्वान्नानुमतिश्च प्राणात्यये तद्दर्शनात् ॥ २८ ॥

प्राणसंवादे श्रूयते छन्दोगानाम्—'न ह वा एवंविदि किञ्चनानन्नं भवति' इति। तथा वाजसनेयिनाम्—'न ह वा अस्यानन्नं जग्धं भवति नानन्नं प्रतिगृहीतम्' इति। सर्व्वमस्यादनीयमेव भवतीत्यर्थः। किमिदं सर्व्वान्नानुज्ञानं शमादिवद्विद्याङ्गं विधीयत उत स्तुत्यर्थं संकीर्त्यत इति संशये विधिरिति तावत् प्राप्तम्। तथा हि प्रवृत्तिविशेषकर उपदेशो भवत्यतः प्राणविद्यासन्निधानात्तदङ्गत्वेनेयं नियमनिवृत्तिरुपदिश्यते। नन्वेवं सति भक्ष्याभक्ष्यविभागशास्त्रव्याघातः स्यात्। नैष दोषः। सामान्यविशेषभावाद्बाधोपपत्तेः। यथा प्राणिहिंसाप्रतिषेधस्य पशुसंज्ञपनविधिना बाधः। यथा च 'न काञ्चन स्त्रियं परिहरेत्तद् व्रतम्' इत्यनेन वामदेव्यविद्याविषयेण सर्व्वस्त्रीपरिहारवचनेन तत्सामान्यविषयं गम्यागम्यविभागशास्त्रं बाध्यते। एवमनेनापि प्राणविद्याविषयेण सर्व्वान्नभक्षणवचनेन भक्ष्याभक्ष्यविभागशास्त्रं बाध्येतेति। एवं प्राप्ते ब्रूमः—नेदं सर्व्वान्नानुज्ञानं विधीयत इति। न ह्यत्र विधायकः शब्द उपलभ्यते, 'न ह वा एवंविदि किञ्चनानन्नं भवति' इति वर्त्तमानापदेशात्। न चासत्यामपि विधिप्रतीतौ प्रवृत्तिविशेषकरत्वलोभेनैव विधिरभ्युपगन्तुं शक्यते। अपि च श्वादिमर्य्यादं प्राणस्यान्नमित्युक्त्वेदमुच्यते नैवं विदः किञ्चिदनन्नं भवति इति। न च श्वादिमर्य्यादमन्नं मनुष्यदेहेनोपभोक्तुं शक्यते। शक्यते तु प्राणस्यान्नमिदं सर्व्वमिति विचिन्तयितुम्। तस्मात् प्राणान्नविज्ञानप्रशंसार्थोऽयमर्थवादो न सर्व्वान्नानुज्ञानविधिः। तद्दर्शयति—"सर्व्वान्नानुमतिश्च प्राणात्यये"—इति। एतदुक्तं भवति प्राणात्यय एव हि परस्यामापदि सर्व्वमन्नमदनीयत्वेनाभ्यनुज्ञायते "तद्दर्शनात्।" तथा हि श्रुतिश्चाक्रायणस्य ऋषेः कष्टायामवस्थायामभक्ष्यभक्षणे प्रवृत्तिं दर्शयति 'मटचीहतेषु कुरुषु' इत्यस्मिन् ब्राह्मणे। चाक्रायणः किल ऋषिरापद्गत इभ्येन सामिखादितान् कुल्माषांश्चखाद अनुपानन्तु तदीयमुच्छिष्टदोषात् प्रत्याचचक्षे। कारणञ्चात्रोवाच 'न वा अजीविष्यमिमानखादन्' इति, 'कामो म उदपानम्'

इति च । पुनश्चोत्तरेषुस्तानेव स्वपरोच्छिष्टपर्युषितान् कुल्माषान् भक्षयाम्बभूव इति । तदेतदुच्छिष्टोच्छिष्टपर्युषितभक्षणं दर्शयन्त्याः श्रुतेराशयातिशयो लक्ष्यते प्राणात्ययप्रसङ्गे प्राणसन्धारणाय भक्ष्यमपि भक्षयितव्यमिति । स्वस्थावस्थायान्तु तन्न कर्त्तव्यं विद्यावताऽपीत्यनुपान-प्रत्याख्यानाद्गम्यते । तस्मादर्थवादो 'न ह वा एवंविदि' इत्येवमादिः ॥

And there is permission of all food, (only) in the case of danger of life; on account of this being shown (by scripture) 28.

In the colloquy of the Prānas the Chāndogas record, 'To him who knows this there is nothing which is not food' (Ch Up V, 1, 2); and the Vājasaneyins, 'By him nothing is eaten that is not food, nothing is received that is not food' (Brh Up VI, 1, 14) The sense of the two passages is that anything may be eaten by him.—A doubt here arises whether the texts enjoin the permission of eating anything as an auxiliary to knowledge—as calmness of mind, etc., are—or mention them for the purpose of glorification.—The pūrvapaksin maintains that the passages are injunctions because thus we gain an instruction which causes a special kind of activity. What, therefore, the text teaches is the non-operation of a definite rule, in so far as auxiliary to the knowledge of the Prānas in proximity to which it is taught —But this interpretation implies the sublation of the scriptural rules as to the distinction of lawful and unlawful food! Such sublation, we reply, is possible, because the present case is one of general rule and special exception. The prohibition of doing harm to any living creature is sublated by the injunction of the killing of the sacrificial animal; the general rule which distinguishes between such women as may be approached and such as may not, is sublated by the text prescribing, with reference to the knowledge of the Vāmadevya that no woman is to be avoided ('Let him avoid no woman, that is the vow', Ch. Up II, 13, 2); analogously the passage which enjoins, with reference to the knowledge of the Prānas, the eating of all food may sublate the general rule as to the distinction of lawful and unlawful food

To this we reply as follows. The permission to eat any food whatever is not enjoined, since the passages do not contain any word of injunctive power; for the clause, 'To him who knows this there is nothing,' etc, expresses only something actually going on. And where the conception of an injunction does not naturally arise we may not assume one from the mere wish of something causing a special line of activity. Moreover the text says that 'for him who knows this there is nothing that is not food', only after having said that everything even

unto dogs and the like is food for the Prāṇa. Now food such as dogs and the like cannot be enjoyed by the human body; but all this can be thought of as food of the Prāṇa. From this it follows that the passage is an arthavāda meant to glorify the knowledge of the food of the Prāṇa, not an injunction of the permission of all food. This the Sūtra indicates in the words, 'and there is permission of all food in danger of life'. That means: Only in danger of life, in cases of highest need, food of any kind is permitted to be eaten. 'On account of scripture showing this'. For scripture shows that the ṛshi Cākrāyaṇa when in evil plight proceeded to eat unlawful food. In the Brahmana beginning, 'when the Kurus had been destroyed by hail-stones' it is told how the ṛshi Cākrāyaṇa having fallen into great wretchedness ate the beans half eaten by a chief, but refused to drink what had been offered on the ground of its being a mere leaving; and explained his proceeding as follows: 'I should not have lived if I had not eaten them; but water I can drink wherever I like.' And again on the following day he ate the stale beans left by himself and another person. Scripture, in thus showing how the stale leaving of a leaving was eaten, intimates as its principle that in order to preserve one's life when in danger one may eat even unlawful food. That, on the other hand, in normal circumstances not even a man possessing knowledge must do this, appears from Cākrāyaṇa's refusing to drink. From this it follows that the passage, 'For to him who knows this,' etc., is an arthavada.

## Brahmanism and Caste

By M. M. CHATTERJI

At the outset must be disclaimed all intention of considering the influence of the system of caste on the social and political welfare of a country like India, divided, as it is, into numerous tracts separated not by physical barriers, but by climatic and other natural conditions and subject to periodical famines affecting different tracts. The present subject is the relation of caste to spiritual life and faith.

Caste has a dual aspect as human type and human institution. In the former aspect caste is natural and in the latter conventional. In the former aspect caste is co-existent with collective human life, be it consciously recognised or be it not This truth is clearly illustrated by the history of Europe where caste, in the Indian sense, does not and never did, in fact, exist.

Out of the chaos, created by the dissolution of Roman thought and dismemberment of the Roman Empire, arose the supremacy of the Christian Church, as the sole agency for co-ordination and harmony in human society. Shedding unessential peculiarities this type is Brahman. The ascendency of the Church, in outward life of peoples, was ended by the Treaty of Westphalia in 1648 A.D. From the ashes of Church supremacy arose monarchical autocracy, destroyed by the French Revolution Then followed commercial rule, directed towards increase of wealth or possessions until checked by the rise of Labour in Politics. It is hardly necessary to point out that these gradations in collective life correspond to Kshatriya, Vaisya, and Sudra types. The evolution of collective life, above indicated, has created hardly any disorder in English history

In India these four types appear to have been recognised in pre-historic period. The " Purusha Sukta'* recognises with functional difference the four types as forming an organic whole.[1]

"The Brahman was His face, the Kingly formed His arms, His thighs what are Vaisyas, from His feet were born Sudras."

---

[1] ब्राह्मणोऽस्य मुखमासीत् बाहू राजन्यः कृतः।
ऊरू तदस्य यद्वैश्यः पद्भ्यां शूद्रोऽजायत॥

Rig- Veda, X, 90, 12.

It declares the universe of existence as a conscious individual with the four types as different but inter-dependent limbs of the same person.

The recognition of caste as type can be traced in an Upanishat of the highest class. Satya Kama (literally, "lover of truth"), though of unknown descent, was, for his truthfulness, invested with the insignia of the Brahman caste and spiritually instructed by Gautama. In this instance an honoured sage placed character over parentage [1]

Light is thrown on the subject in the Mahabharata.

"Of caste there is no distinction. All this passing sphere is of Brahma, created in the beginning. By Karma (conduct) caste-hood is arrived at" [2]

Caste as human type is also declared in Bhagavad Gita.

"According to the classification of action and qualities the four castes are created by me Know me, non-actor and changeless, as even the author of this" [3]

Attempts with indifferent success, appear to have preceded the materialisation of the types into social and political institutions under the authority of Parasuram He had destroyed royal families, root and branch Then he established the four castes and having transferred the royal power to newly formed royal caste through a Brahman retired from active life [4]

The Mahabharat shows that the influence of caste did not touch spiritual life, it being confined within the social and political sphere. This is well illustrated in the account given of Dharma Vyadha, the pious hunter, who attained divine faith though leading a hunter's life [5]

A more striking instance is to be found in the ascetic Brahman being sent by the sage Narada to the herbalist Tuladhar for spiritual instruction [6]

Narada, well-known in Sanskrit sacred writings, was the son of a slave girl, corresponding to a Jewish concubine. He is mentioned in the Chhandagya Upanishat as the spiritual pupil of Sanat Kumar [7]

Vyasa the greatest Vedic teacher was the illegitimate son of the sage Parasara, his mother being a fisher-girl. In

---

[1] Chhar Up., IV. 4.

न विशेषोऽस्ति वर्णानां सर्व्वं ब्राह्ममिदं जगत् ।
ब्रह्मणा पूर्व्वसृष्टं हि कर्म्मभिर्वर्णतां गतम् ॥

[2] Mahabharat, Santi P A., 115.

चातुर्वर्ण्यं मया सृष्टं गुणकर्म्मविभागशः ।
तस्य कर्त्तारमपि मां विद्ध्यकर्त्तारमव्ययम् ॥

[3] Bhagavad Gita, IV, 13.

[4] Mahabharat, Santi P A , 49.

[5] Mahabharat Vana P.A., 20.

[6] *Ibid* , Santi P.A., 26

[7] Chha. Up , 7, 1 and 26

popular Brahmanic belief a curse descends on those who refuse to honour the sages on account of their origin.

The secular character of caste is manifest from its present forms. In Bengal leaving out Brahmans and Kayasthas, caste is mainly occupational. For instance Napit or barber is divided into two water-tight castes, *viz.*, Napit or barber, pure and simple and Madhunapit or confectioner. The strictest Brahmans will receive water and confectionery from the latter but not from the former. Jelia or fisher caste presents mutually exclusive sub-divisions—Jelia and Kaivarta. In Amar-kosha the terms are synonymous.[1] The latter in affluent circumstances call themselves Mahisya. Similarly it is found Sankha Vanika (shell-trader), Kansa Vanika (Brass-trader), Suvarna Vanika (gold-trader), Gandha Vanika (scent-trader), and so forth.

Brahmans of Bengal are mainly the descendants of those trained in the revived Vedic ritualism who immigrated into Bengal in the 8th Century accompanied by the ancestors of high-placed Kayasthas, designated Kulins, that probably in imitation of the differentiation of Brahmanas Kulins and Srotriyas in the 12th Century The Vaidya or Medical caste is peculiar to Bengal. It does not seem unreasonable to believe that the Vaidyas, the most literate caste in Bengal, are remnants of the Buddhist clergy, overthrown by Brahman immigrants in concert with the ruling power Caste rigidity diminishes among Vaidyas according to distance eastwards from Brahmanic centres on the banks of the Ganges. The question is too important and ecclesiastical for incidental treatment. For the present it would not be unreasonable to conclude that caste was not generally taken as inseparable from spiritual life

In the post-Buddhist period, when religious ascendency in Brahmandom generally became the prerogative of monastic orders, the true position of social conventions was shown by the existence of Paramahansas who still carry some marks of the original Brahmanic belief, disconnecting caste from spiritual life. Paramahansas are accepted as the quintessence of monastic life and free from all rules of conduct, monastic or lay. A sanctified will is believed to be their true and only guide in all things and at all times

The disconnection of caste from spiritual life is clearly and repeatedly declared in the Upanishats. A striking instance may be cited. Svetaketu, the son of Aruna, though by caste Brahman, received spiritual instruction from King Prabahana Jaibali[2]

---

1 कैवर्तो दाशः धीवर

2 Chānd. Up., 5, 3, 5.

An exhaustive treatment of spiritual independence of Kings is to be found in Vedantaratna Srimat Hirendra Nath Datta's "Upanishat". The treatise, being in Bengali, a list of spiritual teachers is given in the Appendix.

The true significance of this episode is brought to light by the account given of Svetaketu. Svetaketu returned to his father on completing his pupilage The father found him full of learning but without spiritual knowledge and instructed him in the most pure form of spiritual knowledge, technically called ब्रह्मवस्तुविद्या. His meeting with the royal sage relates evidently to a later period when the hereditary spiritual independence of kings was declared.

The spiritual independence of Kings is also declared in the Bhagavad Gita (Cp IV, 4)

"Thus successively transmitted, this the royal sages knew. By this great lapse of time that spiritual truth was lost, O harasser of thy foes "[1]

The expression राजर्षयो (Royal Sage) in the verse cited is significant. It indicates a class not mere individuals

In three Sutras or aphorisms the Brahma Sutram sums up the canonical teaching of Brahmanism on the subject. They exhibit the promise of special grace to the seeker for spiritual life, in dissociation from caste and condition of life (Adhyay III, Pada 4, Sutras 36, 37, 38)

King Janaka's court, according to the Mahabharata (Santi P.A , 320), was graced by the presence of the spinster Sulava who held a spiritual discussion with the royal sage.

The considerations set forth above seem to lead to the irresistible conclusion that in canonical Brahmanism caste and sex are subjects wholly of secular importance and completely unrelated to spiritual life

The texts that are usually cited as debarring the Sudra caste from acquiring true faith, are, when properly viewed, indicative of a privilege and not a disqualification. They impose on educated theologians the duty of imparting to the uneducated spiritual instruction without subjection to the necessity of hearing and minding the sacred word. It is the duty of those who have to give to those who have not -the rich to the poor, the wise to the unwise But the individual has the right of self-protection on the legal protector's failure

In popular estimation claiming the authority of canonical Brahmanism, the spiritual value of a Sudra and a woman of the highest caste is placed on the same footing. They are both considered debarred from the true spiritual life, declared by the

---

[1] एवं परम्परा प्राप्तमिमं राजर्षयो विदुः ।
स कालेनेह महता योगो नष्टः परन्तप ॥

Bhagavad Gita, IV, 4.

sacred word. The question affecting Sudras has been touched upon. Affecting women a reference is invited to Rigveda (Moudal X) for the names of women seers of truth, expressed by Vedic Mantras For the present purpose may be named Vak, the daughter of the sage Ambhrina, evidently a spinster The Mantras, first declared by her, are known as the Devi Sukta which literally means Vedic declaration concerning the Supreme, viewed as a woman and form the bridge connecting the Tantras with the Vedas.

The Brihadaranyaka Upanishat (Ad. II, Br. 4.) mentions Maitrayi, the wife of the sage Yajnavalkya, as having received the highest spiritual light. The same Upanishat (Ad. III, Br. 6) also mentions Gargi, the spinster daughter of the sage Vachakna, as the only competent questioner of the same sage. in the court of King Janaka. According to Sankara she was gifted with Divine faith (Com. on B S, A. iii, P 4, Ap. 36)

In the Mahabharata is found the account of the fallen woman Pingalā who attained illumination in a single night and of Sulabha named above. All doubt and dispute are dispelled by the words of the Mundakya Upanishat: आत्मज्ञमर्चयेत् भूतिकामः The injunction is that one desirous of well-being must honour him of true divine faith in disregard of caste and custom (Mund. Up. III, 11).

This declaration is noteworthy. It shows that caste condition and other things of external life are as nothing before Divine faith.

The following words may, in conclusion, be cited from the "Svetasvatara Upanishat," declaring the right of man as man to spiritual faith —

"Lend ear, ye children of immortality, in the world that is, all mankind." [1]

---

APPENDIX

| ROYAL PRECEPTORS. | BRAHMAN PUPILS. | REFERENCE. |
|---|---|---|
| Janaka .. | .. Buril Asvatarasvi | .. Br. Up 5, 14. 8. |
| Prabahan Jaibali | .. Shilaka Dalava | .. Chha. Up, 1, 8, 2 |
| Atidhanva Saunaka | .. Udara Shandilya | .. Chha. Up., 1, 9, 3 |
| Prabahan Jaibali | .. Svetaketu | .. Chha. Up, 5, 3, 5 |
| Chitra .. | .. Svetaketu | .. Rig-Veda Kausitaki Up, A, 4 |
| Ajata Satru | .. Dripta Balaki | .. Br. Up, 2, 1, 13. |
| Asvapati Kaikeya | .. Satyajajna, son of Pulusha. | |
| | Indradumna, son of Ballavi. | |
| | Janaka, son of Sarvaraksha. | |
| | Buril, son of Asvatarasya | .. Chh. Up. A. 5. |

---

[1] शृण्वन्तु विश्वे अमृतस्य पुत्राः ।

Sveta, Up. II, 5

# Monasticism and Brahmanism

By M. M. CHATTFRJI

The relation between Monasticism and canonical Brahmanism presents an interesting subject for inquiry. It appears convenient to follow the light held out by the Brahma Sutram (Adhyay III, Pada 4) It opens with the declaration that the end of intelligent existence including spiritual faith may be hoped to result from the study of the Upanishads independently of external works, conditions, and things.

"The purpose of man (is effected) thence, (i.e., through the mere knowledge of Brahman), thus Badarayana opines."

The word "पुरुषार्थ" (Purushartha) translated above as "purpose of man" is usually analysed into four elements according as the will is directed to *dharma* or righteous works enjoined by scriptures, *artha* or possessions, *kama* or delights of life, or *moksha* or unconditioned existence Badarayana teaches that these four-fold objects of desire are added to true faith, declared by the sacred words. It would be sufficient to cite an Upanishadic text in support of the teachings.

"A pious votary of God obtains whatever division of the world and whatever desirable object he may wish to acquire for himself or for another: therefore any one, who is desirous of honour and advantage, should revere him."[1]

(Raja Ram Mohun Roy's Translation.)

The original Sutras in the order of their citation with the related commentaries of Śaṅkara and Rāmanuja are collected in Appendix 1.

After refuting the opposite view that faith, dissociated from work was disapproved by sacred authority in the Brahma Sutram, it shows that two types of those graced with faith are mentioned in the Upanishads according as faith is or is not associated with works and conditions of life (aśramas).

The third Sutra cites sacred authority showing the co-existence of faith with the house-holders' state of life.

"On account of scripture showing (certain lines of) conduct."

(B.S., III, 4, Sutra 3.)

---

1 य यं लोकं मनसा सम्बिभाति विशुद्धसत्त्व कामयते यांश्च कामान् ।
स तं लोकं जायते तांश्च कामांस्तस्मादात्मज्ञमर्चयेत् भूतिकामः ॥
Mundaka Up., 3, 10.

While the 9th Sutra shows presence of faith in the opposite state of life

"But the declarations (of scripture) are equal (on the other side)."

(B.S., III, 4. Sutra 9.)

After dealing with the association of faith with the different conditions of life (asramas) the opposite aspect is dealt with in three Sutras which require special consideration owing to the importance of the subject. The three Sutras are cited below :—

"But also (persons standing) between (are qualified for knowledge); for that is seen (in scripture)."

"This is stated in Smriti also."

"And the promotion (of knowledge is bestowed on them) through special acts."

(B.S., III, 4, Sutras 36, 37. and 38.)

The foregoing considerations seem to make it clear that no special spiritual value is attached to any condition of life प्रव्रज्या (Prabrajya) is mentioned in the Upanishads in the sense of a wandering ascetic's condition of life and not as a congregational institution or monasticism. The term "Prabrajya" is taken as synonymous with संन्यास (Sannyasa) usually translated as renunciation. Even in Manu, "Sannyasa" is taken as the condition of an individual and not of a congregational institution or order.

"But having thus passed the third part of (a man's natural term of life) life in forest, he may live as an ascetic during the fourth part of his existence after abandoning all attachment to worldly objects."[1]

The purely secular and pragmatic value of *asramas* or conditions of life and the comparative superiority of *grhasthya* or the household conditions are fully demonstrated in the following Sutra :—

"On account of his being all, however, there is winding up with householder"

(B.S., III, 4, Sutra 48.)

The position of monasticism in the religion of Buddha is well known. Its adoption and modification by Brahman revivalists is outside present consideration The Ajivikas and Sramanas appear to be wholly unconnected with Brahmanism irrespective of their chronological origin.

---

1 वनेषु तु विहृत्यैवं तृतीयं भागमायुषः ।
चतुर्थमायुषो भागं त्यक्त्वा सङ्गान् परिव्रजेत् ॥

Manu., C.P., VI, 33.

Sankaracharya is claimed as the founder of Brahmanic monasticism. But it can be asserted without hesitation that from his writings no authority can be cited in support of monasticism, as distinguished from wandering asceticism. There is no evidence of his having changed the name given to him in the home of his birth and he is always described as *paribrajaka* or wandering ascetic. His commentary on Adhya III of the Chhandogya Upanishad appears to be clearly in derogation of monasticism the external insignia of which, such as staff (danda) and bowl (kamandalu), are condemned by him. His principal disciples were named Padmapada, Hasthamalaka, and Sureswar, quite different from monastic name ending with "ananda". It is significant that Sureswar's original name of "Maudana" was changed into one, not ending with "ananda" He is said to have founded four *maths* or monasteries. In course of time the personal name and title of Sankaracharya became the official title of the respective heads of the four monasteries in suppression of individual names. This confusion between name and title appears to have led to a fiction hiding the real fact.

But the word "*matha*" meaning a monastery, is unknown to classical Sanskrit and is not at all to be found in any canonical scripture. In Mahabharata, Harivamsa, and Panchatantra it means an ascetic's hut.[1] To trace its derivation according to the method generally prevailing in Sanskrit seems hopeless. "Vihara", the Buddhist term for a monastery, is of high repute both in Pali and Sanskrit. So far as can be ascertained the present meaning of "*math*" is truly of recent origin, long after Viharas came into existence, when Brahman revivalists between the 7th and the 9th century adopted monasticism, they in imitation of the Vihara and in assertion of independence converted an ascetic's hut into a monastery. In practice, no Vedic authority is invoked in the consecration of a *math*, and the ceremony of initiation into any monastic order claiming to be Brahmanical is purely Tantric, without the faintest shadow of Vedic connection. The conclusion seems irresistible that Brahman revivalists took over the Vihara with the property-mark erased and independent proprietorship claimed by inscribing on it the fresh name—*math*.

With the foregoing observation the question of Buddhist origin of monasticism and its subsequent adoption by Brahman revivalists about the 7th century A.D. may be left to the impartial judgment of the disinterested.

To conclude: attention seems to be forced to the claim of Brahman Acharyas or preceptors to universality of their

---

[1] Mahābhārata 12/5348-3/16069.
Harivamsa 15857.
Panchatantra 33/5-116/18,22-117/1.

faith founded on their canonical scripture owing to its independence of personality and forms and conditions of external life, thus available for the benefit of all, while preserving their independence in practice.

## APPENDIX I

Brahma Sutram III, 4—Sutras 3, 9, 36, 37, 38, 48. Original Sutras with the commentaries of Śankara and Rāmānuja.

पुरुषार्थोऽतः शब्दादिति वादरायणः ॥ ३ ॥ ४ ॥ १ ॥

शङ्कराचार्य्यः—अथेदानीमौपनिषदमात्मज्ञानं किमधिकारिद्वारेण कर्म्मण्येवानुप्रविशति आहोस्वित् स्वतन्त्रमेव पुरुषार्थसाधनं भवति इति मीमांसमानः सिद्धान्तेनैव तावदुपक्रमते 'पुरुषार्थोऽतः' इति। अतः अस्मात् वेदान्तविहितादात्मज्ञानात् स्वतन्त्रात् पुरुषार्थः सिध्यतीति वादरायण आचार्य्यो मन्यते, कुत एतदवगम्यते, शब्दादित्याह। तथा हि 'तरति शोकमात्मवित् स यो ह वै तत्परं ब्रह्मवेद ब्रह्मैव भवति ब्रह्मविदाप्नोति पर आचार्य्यवान् पुरुषो वेद तस्य तावदेव चिरं यावन्न विमोक्ष्येऽथ सम्पत्स्य इति 'य आत्माऽपहतपाप्मा' इत्युपक्रम्य 'स सर्वांश्च लोकानाप्नोति सर्व्वांश्च कामान् यस्तमात्मानमनुविद्य विजानाति आत्मा वा अरे द्रष्टव्यः इति चोपक्रम्य 'एतावदरे खल्वमृतत्वं' इत्येवं जातीयका श्रुतिर्विद्यायाः केवलायाः पुरुषार्थहेतुत्वं श्रावयति। अथात्र परः प्रत्यवतिष्ठते ॥

रामानुज—गुणोपसंहारानुपसंहारफला विद्यैकत्व-नानात्वचिन्ता कृता; इदानीं विद्यातः पुरुषार्थः, उत विद्याङ्गकात् कर्म्मणः? इति चिन्त्यते। किं युक्तम्? अतः—विद्यातः पुरुषार्थ इति भगवान् वादरायणो मन्यते; कुतः? शब्दात् दृश्यते ह्यौपनिषदः शब्दो विद्यते पुरुषार्थं ब्रुवन्—

"ब्रह्मविदाप्नोति परम्" (तैत्ति. आन. १ अनु.)

"वेदाहमेतसं पुरुषं महान्तमादित्यवर्णं तमसः परस्तात्।

"तमेवं विद्वानमृत इह भवति। नान्यः पन्था विद्यतेऽयनाय"॥

यथा नद्यः स्यन्दमानाः समुद्रे अस्तं गच्छन्ति नामरूपे विहाय ।
तथा विद्वान् नामरूपादिमुक्तः परात्परं पुरुषमुपैति दिव्यम् ॥
(मुण्ड. ३।२।८) इत्यादिः ॥ ३ ॥ ४ ॥ १

आचारदर्शनात् ॥ ३ ॥ ४ ॥ ३ ॥.

शङ्करः—'जनको ह वैदेहो बहुदक्षिणेन 'यज्ञेनेजे' यक्ष्यमाणो वै भगवन्तोऽहमस्मि' इत्येमादिनि ब्रह्मविदामपि अन्यपरेषु वाक्येषु कर्म्म-सम्बन्धदर्शनानि भवन्ति. तथोद्दालकादीनामपि पुत्रानुशासनादिदर्शनात् गार्हस्थसम्बन्धोऽवगम्यते। केवलात् चेत् ज्ञानात् पुरुषार्थसिद्धिः स्यात् किमर्थमनेकायाससमन्वितानि कर्म्माणि ते कुर्युः, अर्के चेन्मधुविन्देम किमर्थं पर्वतं व्रजेत् इति न्यायात्।

रामानुजः—ब्रह्मविदां प्राधान्येन कर्म्मस्वेवाचारो दृश्यते—अश्वपतिः केकयाः किल आत्मवित्तमस्तद्विज्ञानायोपगतान् तान्मुनीन् प्रत्याह—"यक्ष्यमाणो ह वै भगवन्तोऽहमस्मि" (छान्दो. ५।११।५) इति तथा जनकादयो ब्रह्मावदग्रेसराः कर्म्मनिष्ठाः स्मृतिषु दृश्यन्ते।
"कर्म्मणैव हि संसिद्धिमास्थिता जनकादयः" (गीता. ३।२०.) "इयाज सोऽपि सुबहून् यज्ञान् ज्ञानव्यपाश्रयः"। (विष्णु. पु. ६।६।१२) इति। अतो ब्रह्मविदां कर्म्मप्रधानत्वदर्शनाद् विद्यायाः कर्त्तृ-स्वरूपवेदनरूपत्वेन कर्म्माङ्गत्वमेवेति न विद्यातः पुरुषार्थः ॥ ३ ॥ ४ ॥ ३ ॥ लिङ्गमिदं; प्रातिप्रत्यताम्? इत्यत्राह।

तुल्यं तु दर्शनम् ॥ ३ ॥ ४ ॥ ६ ॥

शङ्करः—यदुक्तमाचारदर्शनात् कर्म्मशेषो विद्येत्यत्र ब्रूमः, तुल्य-माचारदर्शनमकर्म्मशेषत्वेऽपि विद्यायाः। तथाहि श्रुतिर्भवति 'एतद्ध स्म वै तद्विद्वांस आहुर्ऋषयः कावषेयाः किमर्था वयमध्येष्यामहे किमर्था वयं यक्ष्यामहे एतद्ध स्म वै तत्पूर्व्वे विद्वांसोऽग्निहोत्रं न जुहवाञ्चक्रिरे एतं वै तमात्मानं विदित्वा ब्राह्मणाः पुत्रैषणायाश्च लोकैषणायाश्च व्युत्थायाथ भिक्षाचर्य्यं चरन्ति' इत्येवं जातीयका। याज्ञवल्क्यादीनामपि ब्रह्मविदा-मकर्म्मनिष्ठत्वं दृश्यते 'एतावदरे खल्वमृतत्वमिति होक्त्वा याज्ञवल्क्यः

प्रवव्राज' इत्येवमादिश्रुतिभ्यः। अपि च 'यक्ष्यमाणो ह वै भगवन्तोऽहमस्मि' इत्येतल्लिङ्गदर्शनं वैश्वानरविद्याविषयं सम्भवति च सोपाधिकायां ब्रह्मविद्यायां कर्म्मसाहित्यदर्शनं न त्वत्रापि कर्म्माङ्गत्वमस्ति प्रकरणाद्यभावात्। यत् पुनरुक्तं तच्छ्रुतेः' इत्यत्र ब्रूमः॥

रामानुजः—यदुक्तं ब्रह्मविदां कर्म्मानुष्ठानदर्शनाद् विद्या कर्म्माङ्गम् इति; तन्न; विद्याया अनङ्गत्वेऽपि तुल्यं दर्शनम्, ब्रह्मविदां कर्म्मानुष्ठानदर्शनम् अनैकान्तिकम् इत्यर्थः अननुष्ठानस्यापि दर्शनात्। दृश्यते हि ब्रह्मविदां कर्म्मत्यागः "ऋषयः कावषेयाः किमर्था वयमध्येष्यामहे, किमर्था वयं यक्ष्यामहे" इत्यादौ। अतो ब्रह्मविदां कर्म्मत्यागदर्शनात् न विद्या कर्म्माङ्गम्।

कथमिदं उपपद्यते ब्रह्मविदां कर्म्मानुष्ठानमननुष्ठानञ्च? फलाभिसन्धिरहितस्य यज्ञादिकर्म्मणो ब्रह्मविद्याङ्गत्वात् तथाविधस्य कर्म्मणोऽनुष्ठानदर्शनमुपपद्यते। वक्ष्यति च "सर्व्वापेक्षा च यज्ञादिश्रुतेरश्ववत्" (ब्रह्मसू. ३।४।२६) इति। फलार्थस्य तस्यैव यज्ञादेः कर्म्मणो मोक्षैकफलब्रह्मविद्याविरोधित्वात् तस्याननुष्ठानदर्शनमुपपन्नतरम्। विद्यायाः कर्म्माङ्गत्वे कर्म्मत्यागः कथमपि नोपपद्यते॥ ३॥ ४॥ ९॥

अन्तरा चापि तु तद्दृष्टेः॥ ३॥ ४॥ ३६॥

शङ्करः—विधुरादीनां द्रव्यादिसम्पद्रहितानाञ्चान्यतमाश्रमप्रतिपत्तिहीनानां अन्तरालवर्त्तिनां किं विद्यायामधिकारोऽस्ति किंवा नास्तीति संशये नास्तीति तावत् प्राप्तं, आश्रमकर्म्मणां विद्याहेतुत्वावधारणात् आश्रमकर्म्मासम्भवाच्चैतेषाम् इत्येवं प्राप्ते इदमाह, अन्तरा चापि तु, अनाश्रमित्वेनान्तराले वर्त्तमानोऽपि विद्यायामधिक्रियते, कुतः तद्दृष्टेः, रैक्कवाचक्नवीप्रभृतीनामेवम्भूतानामपि ब्रह्मवित्त्वश्रुत्युपलब्धेः॥

रामानुजः—चतुर्णामाश्रमिणां ब्रह्मविद्यायामधिकारोऽस्ति; विद्यासहकारिणा आश्रमधर्म्मा इति चोक्तम्। ये पुनराश्रमान्तरावर्त्तन्ते विधुरादयः, तेषाम् ब्रह्मविद्यायामधिकारोऽस्ति, न वा?

इति विषये आश्रमधर्मैतिकर्त्तव्यताकत्वात् विद्यायाः, अनाश्रमिणां चाश्रमधर्माभावात् नास्त्यधिकारः,—इति प्राप्त उच्यते—

( सिद्धान्तः – )

"अन्तरा चापि तु" इति। तु शब्दः पक्षव्यावृत्त्यर्थः; च-शब्दोऽवधारणे। अन्तरा वर्त्तमानानाम् अनाश्रमिणामपि विद्यायामधिकारोऽस्त्येव। कुतः? तद्दृष्टेः—दृश्यते हि रैक्व-भीष्म-संवर्त्तादीनामनाश्रमिणामपि ब्रह्मविद्यानिष्ठत्वम्। न चाश्रमधर्मैरेव विद्यानुग्रह इति शक्यं वक्तुम्, "यज्ञेन दानेन तपसानाशकेन" (बृहदा. ६। ४। २२) इति दानादीनामाश्रमेषु अनैकान्तिकानामप्यनुग्राहकत्वदर्शनात्। यथा ऊर्द्ध्वरेतःसु विद्यानिष्ठत्वदर्शनादग्निहोत्रादिव्यतिरिक्तैरेव विद्यानुग्रहः क्रियते; तथानाश्रमिष्वपि विद्यादर्शनाद् आश्रमानियतैर्जपोपवासदानदेवताराधनादिभिर्विद्यानुग्रहः शक्यते कर्त्तुम् ॥ २ ॥ ४ ॥ ३६ ॥

अपि च स्मर्य्यते ॥ ३ ॥ ४ ॥ ३७ ॥

शङ्करः—संवर्त्तप्रभृतीनाञ्च जपचर्य्यादियोगादनपेक्षिताश्रमकर्म्मणामपि महायोगित्वं स्मर्य्यते इतिहासे। ननु लिङ्गमिदं श्रुतिस्मृतिदर्शनमुपन्यस्तं का नु खलु प्राप्तिरिति साभिधीयते।

रामानुजः—अपि च, अनाश्रमिणामपि जपादिभिरेव विद्यानुग्रहः स्मर्य्यते :—

"जप्येनापि च संसिध्येद् ब्राह्मणो नात्र संशयः। कुर्य्यादन्यन्न वा कुर्य्यान्मैत्रो ब्राह्मण उच्यते" ॥ (मनु. २। ८७) इति।

संसिध्येत्—जपाद्यनुगृहीतया विद्यया सिद्धो भवतीत्यर्थः ॥ ३॥४॥ ३७॥

विशेषानुग्रहश्च ॥ ३ ॥ ४ ॥ ३८ ॥

शङ्करः,—तेषामपि विधुरादीनामविरुद्धैः पुरुषमात्रसम्बन्धिभिर्जपोपवासदेवताराधनादिभिर्धर्मविशेषैरनुग्रहो विद्यायाः सम्भवति। तथा च स्मृतिः,—

जप्येनैव तु संसिध्येद्ब्राह्मणो नात्र संशयः।
कुर्य्यादन्यन्न वा कुर्य्यान्मैत्रो ब्राह्मण उच्यते ॥

इत्यसम्भवादाश्रमकर्म्मणोऽपि जपेऽधिकारं दर्शयति। जन्मान्तरानुष्ठितैरपि आश्रमकर्म्मभिः सम्भवत्येव विद्याया अनुग्रहः।

तथा च स्मृतिः,—

'अनेक जन्मसंसिद्धस्ततो याति परांगतिं'।

इति जन्मान्तरसञ्चितानपि संस्कारविशेषानुग्रहीतृन् विद्याया दर्शयति। दृष्टार्था च विद्या प्रतिषेधभावमात्रेणाप्यर्थिनमधिकरोति श्रवणादिषु, तस्माद्विधुरादीनामप्याकारो न विरुध्यते॥

रामानुजः,—

न केवलं न्याय-स्मृतिभ्यामयमर्थः साधनीयः।

श्रूयते च अनाश्रमनियतैर्धर्म्मविशेषैर्विद्यानुग्रहः—"तपसा ब्रह्मचर्य्येण श्रद्धया विद्ययात्मानमन्विष्येत् (प्रश्नो. १। १०) इति॥ ३॥ ४॥ ३८.

कृत्स्नभावात्तु गृहिणोपसंहार।

शङ्करः,—तु-शब्दो विशेषणार्थः, कृत्स्नभावोऽस्य विशिष्यते, बहुलायासानि हि बहून्याश्रमकर्म्माणि यज्ञादीनि तं प्रति कर्त्तव्यतयोपदिष्टानि आश्रमान्तरकर्म्माणि च यथासम्भवमहिंसेन्द्रियसंयमादीनि तस्यापि विद्यन्ते, तस्मात् गृहमेधिनोपसंहारो न विरुध्यते॥

रामानुजः,—तु-शब्दश्चोद्यं व्यावर्त्तयति; कृत्स्नभावात् कृत्स्नेषु भावात् कृत्स्नेष्वाश्रमेषु विद्यायाः सद्भावात् गृहिणोऽप्यस्तीति तेनोपसंहारः; तस्मात् सर्व्वाश्रमधर्म्मप्रदर्शनार्थो गृहिणोपसंहार इत्यभिप्रायः॥

तथैतस्मिन्नपि वाक्ये "ब्राह्मणाः पुत्रैषणायाश्च वित्तैषणायाश्च लोकैषणायाश्च व्युत्थायाथ भिक्षाचर्य्यं चरन्ति" (वृहदा. ३।५।१) इति पारिव्राज्यैकाश्रम धर्म्मं प्रतिपाद्य "तस्माद्ब्राह्मणः पाण्डित्यं निर्व्विद्य" इत्यादिना पारिव्राज्यधर्म्मस्थितिहेतुक मौनबल्यसहकारिविधानं प्रदर्शनार्थमित्याह।

APPENDIX II

Mahabharata—12/5348-3/16060
Harivamsa—15857.
Panchatantra—33 5-116/18, 22-117/1.

## The Vedic Divisions

By M. M. CHATTERJI

Let a short summary of the harmony between reason and faith, established by Brahman theology serve as an introduction. The existence of scriptural words which are not meaningless sounds but are self-consistent and indicative of an entity imperceptible by the senses and inconceivable by the mind, must by rational compulsion be taken as designation of what is super-rational and not irrational The Brahmanic exegetical rule of correct interpretation of scriptural teachings in a somewhat amplified form will be found in Appendix I.

Such words as received by individuals in untraceable antiquity are known as the Vedas. They were collected and arranged in four divisions by Vyasa, under divine commission issued to him—when he was called into being not born. and named, Apantaratama. literally meaning "Removed from darkness"[1] Apantaratama, under the name of Vyasa, was the arranger of the Vedas but he was not any of the seers of the truth expressed in Vedic word. These Rishis—literally seers may be called Revealers. The Revealers of spiritual truth are recognised in every religion accepting scriptures. In the Sankhya system they are classified in a plain, rational form. intelligible to the ordinary mind. Revealers are, in this system, divided into three classes, namely, "Prakrita" or "Svavavika," "Sansiddhika," and "Vaikarika." Their general designation is "Sidha" or perfect. The perfection of "Svavavika or Prakrita" Sidhas is inherent and not acquired. At no point of time they are not perfect, their perfection is without beginning or end. So far as the individual is concerned the "Sansidhika" Sidhas were once imperfect but acquired perfection in the remote past. They work from no self-centered motive but out of compassion for the sufferings of the imperfect. While the origin of perfection of Vaikarikas is traceable in time and to their preceptors. All these classes of the perfect are included in Prakriti, the totality of powers, attributes, and forms

But Prakriti and Purusha or pure sentience are one in being *per se*. This is known as Kaivalya or onliness. There can scarcely be any doubt that with changed terminology this classification was adopted by the Mahayana form of Buddhism.

---

[1] Appendix II.

Adi[1] or original Buddhas are Svavavika Sidhas, Dhyani Buddhas are Sansidhas, and the Vaikarika Sidhas are Manushi Buddhas.

The history of human thought makes it clear that every object considered abstract or inanimate at a later period, was regarded at an earlier period as sentient being. This practice now survives as poetical expression. The process is reversed when a spiritual idea originates in the intellectual form which is universal. Divine aspects can, obviously, be expressed only in an intellectual form. But in course of time and for general apprehension each aspect is taken as a person. Following this rule the category technically known as Mahat-tattva, the highest form of specialised existence in the Sankhya system, and declared as over-shadowed by Purusha or sentience is the same as Brahma, the archangel of creation. According to the Svetaswatara[2] Upanishat "the Supreme Being calls him into existence and transmits into him all the Vedas." And Brahma is the ultimate source of revelation. The knowledge derived from Brahma is taken to have been declared by Sanaka, Sananda, Sonatan, and Sanat Kumar, the four eternally youthful sages described as sons of Brahma's mind. They are Prakritika or Swavavika Sidhas, while Kapila and Suka, who acquired perfection within definite time as result of devotion, are to be taken as Sansidhika Sidhas. Vasista, the paragon of non-resistance, is classifiable as Sansidhika Sidha or perfected individual. He and his great grandson Vyasa, owing to their respective peculiarities, are termed Adhikarika Purushas. They are called Adhikarika Purushas in the Brahma Sutram and described as respectively charged with divine mission for the benefit of creatures.

The Brahmanic doctrine directed to faith in the eternal, all powerful, all-wise Isvara, the Creator, Sustainer, and Absorber of all reduces the importance of the Svavavika Sidhas for practical purposes of devotion. But the two doctrines, Vedic and Sankhya, are no ways in conflict. For He who can create perfectible beings can equally well create those that are perfect when projected into individual existence.

Apantaratama deserves special consideration for the present purpose. The Mahabharata[3] relates how Apantaratama appeared under the name Vyasa to arrange the Vedas and how

---

[1] आदि बुद्धाः प्रकृत्यैव सर्व्वधर्म्माः सुनिश्चिताः ।

Adi Buddhas, the perfect certainty of all righteousness are Prakriti even. This identity is traced by Gaudapada in Mandakya Karika.

[2] यो ब्राह्मण विदधाति पूर्व्वं वेदांश्च सर्व्वान् प्रहिणोति तस्मै ।

Svetaswatara Upanishat.

[3] Mahabharata, Shanti Parva, Mokshadharma Parbadhya, A. 350.

he executed his commission and continued his individual existence on earth Apantaratama's name in his earthly life was Vyas. According to the Vedantic School of Sankaracharya the preceptorship of Vyas in his life time descended on his son Suka. These considerations are explanatory of the theological position of Puranas and the Mahabharata as subordinate to the Vedas of which the authorship is attributed to Vyasa

The Vedas are accepted as the store-house, supplying when properly understood the means for the attainment of temporal and spiritual well-being of mankind, irrespective of external condition

According to the Mahabharata time came when the Vedas needed arrangement in parts calculated to apply to different stages of the social growth of the human race and for this purpose special divine inter-position was necessary

The principle underlying the division of the Vedas into four classes is strikingly interesting.

In the most primitive condition of humanity every individual man has constantly to fight for food and wife at the risk of life and limb In that stage of social life magical rites compelling self-surrender on the part of a woman or paralysing an enemy from a distance and other means of self-gratification accompanied by some self-security would be invaluable, and the master magician would be the king and the subjects and tribesmen prosperous in life This is the underlying unity of the Atharva Veda With the growth of social stability and extension the practice of magic for individual benefit will be prohibited as destructive of orderly social existence and will be allowed only as between heads of states, king and king

. Rites adopted to this end, as declared in Vedic mantras, are collected in the division of the Vedas called the Yajurveda

Further progress of peace and orderliness generates the inquiry relating to the agency that can create a rite which when duly performed secures the desired result Obviously, the agency is of much greater value than all the rites collectively The result does not benefit the agent but the performer of the rite. The number of rites performed does not exhaust the power of the agent unmoved by fear in fulfilling the performer's desire. The value of the agent, when realised, is love in theological language. This is the characteristic of the Vedic division, the Samaveda

Continued social advancement generates the intellectual search for the nature of the Agent as to what and how He is. The search made in faith declares the Divine Being as apprehensible and not comprehensible This is the distinguishing mark of the Rigveda.

It is clear that the principle of division relates to general conditions and not to individual self There can be nothing to prevent the presence of the four types among contemporaries

Superficial observation can trace the presence of gratification in religions accepting scriptures corresponding to the principle of the Vedic classified arrangement of Vyasa. The ten great (maha) Upanishats are connected as appendices with all the four Vedas, showing the independence of spiritual life. It is unaffected by all external conditions of existence. The door of spirituality is open to all irrespective of race, nationality, sex and position, social and intellectual.

The history of previous attempts to trace in time the origin of Vedic mantras and the great Upanishats must discourage all attempts in that direction.

---

## APPENDIX I

Savara Swami, the exegetist of Vedic Ritualism, technically called Purva Mimansa, gives a very clear exposition of the rational basis of Scriptural teaching which is obviously super-rational. His exposition is founded on technical logic and psychology, not easy for general grasp in the present day. An attempt to modernise his thought may not be inexcusable The normal sources of right knowledge are sense perception and the logical faculty. The sphere of sense-perception is confined to sound, touch, visible form, taste, and smell responding to ear, skin, eye, tongue, and nose. The work of the logical faculty is either deductive or inductive. Induction leads only to probability and not to certainty which, along this line, can only be attained by omniscience, unclaimed by all users of the inductive method of acquiring knowledge. In deductive logic the major premise must be more extensive than the conclusion. Obviously, therefore, the all-comprehending cannot be the conclusion of any process of deductive reasoning. And yet the Scriptures declare that the ultimate Reality—the Being *per se* is none of the objects of the senses or their aggregate. Nor can that Reality or Being be spoken by speech or minded by the mind. So the Scriptures teach. Whence these teachings? Their source is designated Revelation in English, in which the substance of Scriptural teaching indicated can be stated thus:

God can be apprehended and not comprehended. That God is can be conceived but what and how He is, is inconceivable. This truth is received by faith and not by knowledge with the full assent of reason which points out that if the words, giving birth to faith, did not indicate truth their very existence is inexplicable. Exegetists teach that the Scriptural teachings are correctly understood only when they are seen to point to something, untouched by sense and the logical faculty. "Apurvata," that is, dissociation from sense and reason is the essential characteristic of the truth, declared by the Scriptures. All scriptural statements whose meaning lies within the sphere of sense-perception or of the logical faculty, must be taken as "Arthavāda" or figurative and not literal or Yathārthavāda There are other tests of true spiritual interpretation, though not of great use in the present connection. They have to be stated only for the sake of completeness. Harmonious relation between the beginning and the end ("Upakrama", "Upasanhāra"), repetition in different forms ("Abhyāsa"), and usefulness ("Falasruti")

In these observations * relating to Brahmanic faith an attempt has been made to avoid all theological technicalities, not necessary as a disclaimer of originality of the present effort. They are intended to serve as preparatory to the consideration of the present-day conflict between Science and Religion. The apparently rational basis of the conflict will disappear on consideration of the respective spheres of Science and Religion—Science lies within the sphere of sense and logic while Religion is admittedly super sensuous and super-rational distinguished from irrational. Reason, though not the generator of Religion, cannot be discordant with it. The relation with sense is similar. Religion is hospitable to sense which, however, cannot touch Religion.

To descend to particulars. The main conflict is between narratives of creation, contained in some writings, regarded as holy, and the scientific doctrine of organic evolution.

In the most authoritative scriptures of Brahmanism different descriptions are given of creation For instance, compare Chāndogyopanishad (III, 19) and Aitareyopanishad (IV) Śaṅkara in his commentary on the text, last referred to, clearly states :

"नहि सृष्ट्याख्यायिकादिपरिज्ञानात् फलं किञ्चिदिष्यते ।"

(No benefit can, in truth, be expected from knowledge of narratives of creation and others of that kind.)

The only object of such narratives seems to be to teach the value of super-temporal peace against unresting change and the contingent character of all our existence.

Some Brahmanic scriptures give the fœtal history of the human individual which is practically identical with what Haeckel calls the doctrine of recapitulation. One wonders how Science will explain the existence of types Specks of waggling matter, called protoplasm, which Science cannot distinguish from one another, develop very differently—one into a vegetable, another into an animal, and the third into a human being Imagine the absence of pre-existing individuals of these types and then search for explanation of the difference in typical development, estimating the chances of success in the search

Then comes the question of speech, the vehicle of Revelation At the outset one is met with the distinction between sound (in Sanskrit *Dhvani*) and word (in Sanskrit *Sabda*). The sound of a loud explosion startles, frightens, and may result in the hearer's running away. But it generates no idea for intellectual apprehension, capable of being connected with other ideas and communicated to others. While a word, for instance, "love" or "fear", gives rise in the mind to a definite and abiding impulse, operative in action, feeling and thought, long after it is for the first time heard and is capable of communication to others independently of gesture. The most noticeable peculiarity of word is its pervasiveness in regard to the whole of conscious life and freedom from the restraint of individual life and its conditions. In short, word generates mental modification, dissociated from the body and its functions and is pervasive, permanent, and communicable.

In an authoritative Sanskrit treatise on the subject, though not of the highest spiritual value, the genesis of Word is traced through four stages. A ray of thought impinges on the individual consciousness from a source to that consciousness unknown. This immediately generates the impulse to find for it an expression in word which, when found, excites the effort for its utterance with which the cycle is completed. The thought impulse, undefined, is known as "para," the supreme, in the next stage it is named "pasyanti" or watching (literally, the seeing one). In the stage immediately following it is "madhyamā"

* See Appendix I.

or the middle one, when the word, though unuttered, is known to the would-be utterer and when uttered it is "vaikhari" or the sharp one.

In the universal aspect word is known as the Word-God (Sabda Brahma) Lakshmanacharya of Kanauj in his "Sarada tilak" sums up the Tantric teaching on the subject.

The first in thought, but not in time, is Nāda (literally, sound) but in this connection unconditioned consciousness—नादात्मा नदति स्वयम् (literally, the sound spirit sounds of itself). Thence is determination or the determining point, Vindu From Vindu are the three powers, namely, cognition, impulsion, and inhibition. Consciousness, or sentience, thus viewed, is Sabda Brahma or Word-God. He says: "It is my conviction that Sabda Brahma is the consciousness of all individuals —चैतन्यं सर्व्वभूतानां शब्दब्रह्मेति मे मतिः."

The enquirer may be usefully referred to the opening chapter of the Gospel of St John

The above summary may be guilty of prolixity. But some reference to the subject seems necessary for an examination of the relation of speech to organic evolution

The subject for consideration is the absence in the animal world of word, as distinct from sound. In brief, words have a meaning independent of the sound, as is evidenced by the existence of synonyms in the same language, apart from figurative expressions. In the animal world are found bark, grunt, twitter, chirp, and other forms of acoustic expressions They are useful in maintaining individual and associated life Impulses of fear and other preservative and associative instincts are expressible by the animal call The sphere of word is far more comprehensive Word can express the ideas of cause and effect, substance and form, certainty, contingency, and so forth A shout may be helpful in avoiding danger to life and limb but can it independently of word, express the emotion of fear, apart from its bodily effect? This peculiarity of word is called "sphota" by the school of Pānini. Take for example, the word "*go*" (गो) meaning cow On its utterance images of cows, different in colour and form, present themselves to different hearers *Sphota* is the potency of a word to evoke in individuals thought images of different forms but all belonging to the same class Sankara accepts the existence of "sphota" but rejects its eternal character as maintained by the Panini school [1]

Thus viewed, word appears to be *sui generis* Will it be unpardonable to invite the attention of Science to the peculiar characteristic of word? In conclusion, Religion may well say to Science—"Now let us shake hands and part, each to his business"

MOHINI MOHAN CHATTERJI

[1] Sankara's commentary on the "Brahma Sutra". Thibaut's translation (S B E, Vol. I, pp 204-209)

## APPENDIX II

### *Brahma Sutram*

### III Adhyaya, 3 Pada, Sloka 32

**यावदधिकारमवस्थितिराधिकारिकाणाम् ॥**

विदुषो वर्त्तमानदेहपातानन्तर देहान्तरमुत्पद्यते न वेति चिन्त्यते। ननु विद्यायाः साधनभूतायाः सम्पत्तौ कैवल्यनिर्वृत्तिः स्यान्न वेति नेयं चिन्तोपपद्यते। न हि पाकसाधनसम्पत्तावोदनो भवेत् न वेति चिन्ता सम्भवति। नापि भुञ्जानस्तृप्येत् न वेति चिन्त्यते। उपपन्ना त्वियं चिन्ता। ब्रह्मविदामपि केषाञ्चिदितिहासपुराणयोर्देहान्तरोत्पत्तिदर्शनात्। तथा ह्यपान्तरतमा नाम वेदाचार्य्यः पुराणर्षिर्विष्णुनियोगात् कलिद्वापरयोः सन्धौ कृष्णद्वैपायनः सम्बभूवेति स्मरणम्। वसिष्ठश्च ब्रह्मणो मानसः पुत्रः सन्निमिशापादपगतपूर्व्वदेहः पुनर्ब्रह्मादेशात् मित्रावरुणाभ्यां सम्बभूवेति। भृग्वादीनामपि ब्रह्मण एव मानसानां पुत्राणां वारुणे यज्ञे पुनरुत्पत्तिः स्मर्य्यते। सनत्कुमारोऽपि ब्रह्मण एव मानसः पुत्रः स्वयं रुद्राय वरप्रदानात् स्कन्दत्वेन प्रादुर्बभूव। एवमेव दक्षनारदप्रभृतीनामपि भूयसी देहान्तरोत्पत्तिकथा तेन तेन निमित्तेन भवति स्मृतौ। श्रुतावपि मन्त्रार्थवादयोः प्रायेणोपलक्ष्यते। ते च केचित् पतिते पूर्व्वदेहे देहान्तरमाददते केचित्तु स्थित एव तस्मिन् योगैश्वर्य्यवशादनेकदेहादानन्यायेन। सर्व्वे चैते समधिगतसकलवेदार्थाः स्मर्य्यन्ते। तदेतेषां देहान्तरोत्पत्तिदर्शनात् प्राप्तं ब्रह्मविद्यायाः पाक्षिकं मोक्षहेतुत्वमहेतुत्वं वेत्यत उत्तरमुच्यते। न। तेषामपान्तरतमःप्रभृतीनां वेदप्रवर्त्तनादिषु लोकस्थितिहेतुष्वधिकारेषु नियुक्तानामधिकारतन्त्रत्वात् स्थितेः। यथासौ भगवान् सविता सहस्रयुगपर्य्यन्तं जगतोऽधिकारं चरित्वा तदवसाने उदयास्तमयवर्ज्जितं कैवल्यमनुभवति ‘अथ तत ऊर्द्ध उदेत्य नैवोदेता नास्तमेतैकल एव मध्ये स्थाता’ इति श्रुतेः। यथा च वर्त्तमाना ब्रह्मविदः प्रारब्धभोगक्षये कैवल्यमनुभवन्ति। “तस्य तावदेव चिरं यावत् न विमोक्ष्येऽथ सम्पत्स्ये” इति श्रुतेः। एवमपान्तरतमःप्रभृतयोऽपीश्वराः परमेश्वरेण तेषु तेष्वधिकारेषु नियुक्ताः सन्तः सत्यपि सम्यग्दर्शने कैवल्यहेतावक्षीणकर्म्माणो यावदधिकारमवतिष्ठन्ते तदवसाने चापवृज्यन्ते इत्यविरुद्धम्। सकृत्प्रवृत्तमेव हि ते कर्म्माशयमधिकारफलदानायातिवाहयन्तः स्वातन्त्र्येण गृहादिव गृहान्तरमन्यमन्यं देहं सञ्चरन्तः स्वाधिकारनिर्व्वर्त्तनाय अपरिमुषितस्मृतय एव देहेन्द्रियप्रकृतिवशित्वात् निर्माय देहान् युगपत् क्रमेण वाऽधितिष्ठन्ति। न चैते जातिस्मरा इत्युच्यन्ते। त एव ते, इति स्मृतिप्रसिद्धेः। यथा सुलभा ब्रह्मवादिनी जनकेन विवदितुकामा व्युदस्य स्वं देहं जानकं देहमाविश्य व्युह्य तेन पश्चात् स्वमाविवेश इति स्मर्य्यते। यदि ह्युपयुक्ते सकृत्प्रवृत्ते प्रारब्धविपाके कर्म्मणि कर्म्मान्तरमप्रारब्धविपाकं देहान्तरारम्भकारणमाविर्भवेत् ततोऽन्यदप्यदग्धबीजं कर्म्मान्तरं तद्वदेव प्रसज्येतेति ब्रह्मविद्यायाः पाक्षिकं मोक्षहेतुत्वमहेतुत्वं वा आशङ्क्येत। न त्वियमाशङ्का युक्ता। ज्ञानात् कर्म्मबीजदाहस्य श्रुतिस्मृतिप्रसिद्धत्वात्। तथा हि श्रुतिः—

> ‘भिद्यते हृदयग्रन्थिश्छिद्यन्ते सर्व्वसंशयाः।
> क्षीयन्ते चास्य कर्म्माणि तस्मिन् दृष्टे परावरे’॥ इति—

'स्मृतिलम्भे सर्व्वग्रन्थीनां विप्रमोक्ष' इति चैवमाद्या । स्मृतिरपि ।

"यथैधांसि समिद्धोऽग्निर्भस्मसात् कुरुतेऽर्जुन ! ।
ज्ञानाग्निः सर्व्वकर्म्माणि भस्मसात् कुरुते तथा" ॥ इति—
"बीजान्यग्न्युपदग्धानि न रोहन्ति यथा पुनः
ज्ञानदग्धैस्तथा क्लेशैर्नात्मा सम्पद्यते पुनः" ॥ इति—

चैवमाद्या । न चाविद्यादिक्लेशदाहे सति क्लेशबीजस्य कर्म्माशयस्यैकदेशदाह एकदेशप्ररोहश्चेत्युपपद्यते । न ह्यग्निदग्धस्य शालिबीजस्यैकदेशप्ररोहो दृश्यते । प्रवृत्तफलस्य तु कर्म्मणो मुक्तेषोरिव वेगक्षयात् निवृत्तिः । 'तस्य तावदेव चिरम्' इति शरीरपातावधिक्षेपकरणात् । तस्मादुपपन्ना यावदधिकारमाधिकारिकाणामवस्थितिः । न च ज्ञानफलस्यानैकान्तिकता । तथा च श्रुतिरविशेषेणैव सर्व्वेषां ज्ञानान्मोक्षं दर्शयति 'तद्यो यो देवानां प्रत्यबुध्यत स एव तदभवत्तथर्षीणां तथा मनुष्याणाम्' इति । ज्ञानान्तरेषु चैश्वर्य्यादिफलेष्वासक्ताः स्युर्महर्षयस्ते पश्चादैश्वर्य्यक्षयदर्शनेन निर्व्विण्णाः परमात्मज्ञाने परिनिष्ठाय कैवल्यं ययुरित्युपपद्यते ।

'ब्रह्मणा सह ते सर्व्वे सम्प्राप्ते प्रतिसञ्चरे ।
परस्यान्ते कृतात्मानः प्रविशन्ति परं पदम्' ॥ इति स्मरणात् ।

प्रत्यक्षफलत्वाच्च ज्ञानस्य फलविरहाशङ्कानुपपत्तिः । कर्म्मफले हि स्वर्गादावनुभवानारूढे स्यादपि कदाचिदाशङ्का भवेद्वा न वेति । अनुभवारूढन्तु ज्ञानफलं 'यत् साक्षादपरोक्षाद्ब्रह्म' इति श्रुतेः । 'तत्त्वमसि' इति च सिद्धवदुपदेशात् । न हि तत्त्वमसीत्यस्य वाक्यस्यार्थस्तत् त्वं मृतो भविष्यसीत्येवं शक्यः परिणेतुम् । 'तद्धैतत् पश्यन् ऋषिर्व्वामदेवः प्रतिपेदेऽहं मनुरभवं सूर्य्यश्च' इति सम्यग्दर्शनकालमेव तत्फलं सर्व्वात्मत्वं दर्शयति । तस्मादैकान्तिकी विदुषः कैवल्यसिद्धिः ॥

Brahma Sutram,

III Adhyaya, 3 Pada, Sloka 32.

"Of those who have a certain office there is subsistence (of the body) as long as the office lasts".

The question here is whether for him who has reached true knowledge a new body originates after he has parted with the old one or not.—But an objection is here raised at the outset there is really no occasion for inquiring whether knowledge when reaching its perfection brings about its due effect, *viz*, complete isolation of the Self from all bodies or not; not any more than there is room for an inquiry whether there is cooked rice or not, after the process of cooking has reached its due termination; or, for an inquiry whether a man is satisfied by eating or not.—Not so, we reply. There is indeed room for the inquiry proposed, as we know from *itihasa* and *purana* that some persons although knowing Brahman yet obtained new bodies. Tradition informs us, *e g*, that Apantaratamas, an ancient *Rishi* and teacher of the Vedas, was, by the order of Vishnu, born on this earth as Krishna Dvaipayana at the time when the Dvaparayuga was succeeded by the Kaliyuga. Similarly Vasishtha, the son of Brahman's mind, having parted from his former body in consequence of the curse of Nimi, was on the order of Brahman, again procreated by Mitra and Varuna. Smriti further relates that Bhrigu and other sons of Brahman's mind were again born at the sacrifice of Varuna. Sanat Kumara also, who likewise was a son of Brahman's mind, was, in consequence of a boon being granted to

Rudra, born again as Skanda. And there are similar tales about Daksha, Nārada and others having, for various reasons, assumed new bodies Stories of the same kind are met with in the mantras and arthavadas of Suriti Of some of the persons mentioned it is said that they assumed a new body after the old body had perished; of others that they assumed, through their supernatural powers, various new bodies while the old body remained intact all the while. And all of them are known to have completely mastered the contents of the Vedas.

On the ground of all this the purvapakshin maintains that the knowledge of Brahman may, indifferently, either be or not be the cause of final release

This we deny, for the reason that the continuance of the bodily existence of Apantaratamas and others—who are entrusted with offices conducive to the subsistence of the worlds, such as the promulgation of the Vedas and the like—depends on those their offices As Savitrar (the sun), who after having for thousands of yugas performed the office of watching over these worlds at the end of that period enjoys the condition of release in which he neither rises nor sets, according to Kh Up III, II, I, 'When from thence he has risen upwards, he neither rises nor sets He is alone standing in the centre,' and as the present knowers of Brahman reach the state of isolation after the enjoyment of those results of action, which have begun to operate has come to an end, according to Kh Up VI, 14, 2 'For him there is only delay so long as he is not delivered from the body,' so Aparantamas and other Lords to whom the highest Lord has entrusted offices, last —although they possess complete knowledge, the cause of release- -as long as their office lasts, their works not yet being exhausted, and obtain release only when their office comes to an end. For gradually exhausting the aggregate of works the consequences of which have once begun, so as to enable them to discharge their offices; passing according to their free will from one body into another as if from one house into another, in order to accomplish the duties of their offices; preserving all the time the memory of their identity, they create for themselves through their power over the material of the body and the sense organs new bodies, and occupy them either all at once or in succession. Nor can it be said that when passing into new bodies they remember only the fact of their former existence (not their individuality); for it is known that they preserve the sense of their individuality. Smriti tells us, *e.g.* that Sulabha, a woman conversant with Brahman, wishing to dispute with Ganaka, left her own body, entered into that of Ganaka, carried on a discussion with him, and again returned into her own body. If in addition to the works the consequences of which are already in operation, other works manifested themselves, constituting the cause of further embodiments, the result would be that in the same way further works also, whose potentiality would in that case not be destroyed, would take place, and then it might be suspected that the knowledge of Brahman may, indifferently, either be or not be the cause of final release But such a suspicion is inadmissible since it is known from Sruti and Smriti that knowledge completely destroys the potentiality of action. For Sruti says, 'The fetter of the heart is broken, all doubts are solved, all his works perish when He has been beheld who is high and low' (Mu. Up. II, 2, 8); and, 'When the memory remains firm, then all the ties are loosened' (Kh. Up. VII, 26, 2) And Smriti similarly says, 'As a fire well kindled, O Arguna, reduces fuel to ashes, so the fire of knowledge reduces all actions to ashes;' and, 'As seeds burned by fire do not sprout again, so the Self is not again touched by the afflictions which knowledge has burned'. Nor is it possible that when the afflictions such as ignorance and the like are burned, the aggregate of works which is the seed of affliction should be partly burned, but partly keep the power of again springing up; not any more than the seed of Sali, when burned, preserves the power of sprout-

ing again with some part. The aggregate of works, however, whose fruits have once begun to develop themselves comes to rest through effecting a delay which terminates with the death of the body, just as an arrow discharged stops in the end owing to the gradual cessation of its impetus; this in agreement with Kh. Up. VI, 14, 2. 'For him there is only delay,' &c. We have thus shown that persons to whom an office is entrusted last as long as their office lasts, and that nevertheless there is absolutely only one result of true knowledge—In accordance with this, scripture declares that the result of knowledge on the part of all beings is equally final release, *cp.* 'So whatever Deva was awakened he indeed became that, and the same with Rishis and men' (Bri. Up. I. 4. 10). Moreover it may be the case that (some) great Rishis had attached their minds to other cognitions whose result is lordly power and the like, and that later on only when they became aware of the transitory nature of those results they turned from them and fixed their minds on the highest Self, whereby they obtained final release. As Smriti says, 'when the mahapralaya has arrived and the highest (*i.e.* Hiranyagarbha) himself comes to an end, then they all, with well-prepared minds, reach together with Brahman the highest place '—Another reason precluding the suspicion that true knowledge may be destitute of its result is that that result is the object of immediate intuition. In the case of such results of action as the heavenly world and the like which are not present to intuitional knowledge there may be a doubt; but not so in the case of the fruit of true knowledge, with regard to which scripture says, 'The Brahman which is present to intuition, not hidden' (Br. Up. III, 4, 1), and which in the passage, 'That art thou,' is referred to as something already accomplished. This latter passage cannot be interpreted to mean, 'Thou wilt be that after thou hast died;' for another Vedic passage declares that the fruit of complete knowledge, *viz.* union with the universal Self, springs up at the moment when complete knowledge is attained. (The Rishi Vamadeva saw and understood it, singing, "I was Manu, I was the sun".

For all these reasons we maintain that those who possess true knowledge reach in all cases final release

## Was Viśākha Datta a Bengali ?

By JOGENDRA CHANDRA GHOSH

Visakha Datta was the author of the reputed Sanskrit drama Mudrārākṣasam. He was the son of Mahārāja Prthu, the grandson of Vatēśvara Datta, a feudatory chief (sāmanta). Nothing more can be known about him positively from his drama. Professor Bidhubhusan Goswami considers him to be an inhabitant of the Northern India. He, in the introduction to his edition of the drama, writes .—" The poet Viśākha Datta or Viśākha Dēva, as he is called in some editions, was in all probability a native of Northern India ; the geographical references in the drama, all except one, point to places situated in Northern India. The last verse referring to the Varāha Avatara of Visnu read and interpreted in the light of the fact that temples and remains connected with the Varāha-Avatāra are to be frequently met with in Northern India. And the very name of the dramatist and that of his grandfather, the former probably adopted in honour of the god Kārtikēya, whose temple in Devagir (Deogoda) was highly famous in earlier times, and the latter perhaps adopted in honour of the phallic image of Siva situated near the Aksayavaṭa (or the imperishable banyan tree) on the confluence of the Ganges and the Jamuna suggest the same conclusion. All this, however, is probable hypothesis and stands in need of confirmation."

The points gathered from the internal evidence and referred to above, can all be traced to Northern Bengal. Nay, we can add some more. If the above evidence is considered sufficient to call him an inhabitant of Northern India, we think, we have better grounds for claiming him to be a native of Northern Bengal. We shall now show that the temples of Varāha-Avatāra and of god Kārtikēya were in existence in Northern Bengal from very early times. The Vaṭēśvara Śiva is still in existence.

Temple of Varāha-Avatāra—in the copper-plate grants of the fifth and the sixth centuries A.C., discovered at Dāmōdarapura of the district of Dinajpur in Northern Bengal we find that lands were granted for the erection and the maintenance of the temples of Kokāmukha-Svāmī and Svēta-varāha-Svāmī in Dōngāgrāma in Himavacchikhara (the Himala-yas). The grants were issued from the Kōṭivarṣa adhikaraṇa of the Puṇdravardhana bhūkti, which are situated in Bengal. The find-spot of the grants is also in Bengal. We may,

therefore, conclude that these temples were in Bengal (*Ep. Ind*, Vol. XV)

Kōkāmukha tīrtha or Kokāmukha kṣētra, a place of pilgrimage sacred to the Varāha-Avatara, is mentioned in the Mahābhārata (Vana-parvva, chap. 84. and Anuśāsana-parrva, chap 25), Varāha-Purāṇa (chaps 113, 122 and 140) and Brahma-Purāna (chaps 219 and 220). It is stated in chapter 122 of the Varāha-Purāna that once a Śaka prince of Ānandapura with his wife, a princess of Candrapura, accompanied by merchants, citizens, vaiśyas and lovely ladies made a pilgrimage to the Kōkāmukha They reached the place after undergoing a fatiguing journey for many days. This Ānandapura, we believe, is modern Vadanagara, also called Nagara, which was the original home of the Nāgara-Brahmaṇas of Gujrat This shows that the tīrtha was well-known throughout India, so that people from distant Gujrat came to pay a visit to this place. In chapter 140 have been described the principal places of the tirtha which comprised five yōjanas. Among the places mentioned are the rivers Kausiki Kōkāmukha and the Trisrōtā All these rivers are in Northern Bengal, answering to the modern names of Kosi, Kankāi and the Tista In chapter 219 of the Brahma-Purana we find that the Varāha-Avatāra after rescuing the Pitris from the perils of the Rākṣasas performed śraddha in Kōkāmukha-ksētra, and that the goddess Earth bore to Varāha Avatara a son named Narakāsura, who was given the kingdom of Pragjyōtisapura or Kāmarūpa, the modern Assam According to Kālikā-Purāna Narakāsura was brought up by king Janaka of Mithilā. All these go to show that Kokamukha-ksētra lay within Mithilā and Kāmarūpa, i.e., in North Bengal Kokāmukha-svami, the presiding deity of the Kōkāmukha-ksētra, is none other than the Varāha-Avatāra. This ksētra is named after the river Kōkā at the foot of the Himālaya The Varāha-Avatara said —

> " Kōka-nad-iti vikhyatā giri-rāja-samāśritā ।
> Tīrtha-koti-mahapunya madrūpa-paripālitā ॥ 106 ॥
> Asyām-adya pravrtti vai nivatsyamy-agha-nāsakrit ।
> Varaha-darsanam punyam pūjanam bhukti-muktidam
> [ ॥107 ॥
>
> (Brahma-Purana, chap 219)

Kārtikēya Temple—In Rāja-Tarañgiṇī, the history of Kasmir, by Kalhaṇa, is stated that King Jayāpīḍa (772-806 A.C.) came to Gauda and saw a temple of Kārtikēya in Paundra-vardhana, the capital of the country

> " Maṇdalēṣu narēndrāṇāṃ payōdānām-iv-āryyamā ।
> Gauda-rājāśrayam guptaṃ Jayant-ākhyēna bhūbhujā ॥
> Pravivēśa kramēn-ātha nagaram Paundra-vardhanaṃ ।
> Tasmin saurājya-ramyābhiḥ prītaḥ paura-vibhūtibhiḥ ॥

Lāsyam sa-draṣṭum-aviśat Kārtikēya-nikētanam ।
Bharat-ānugamālakṣya nritya-gīt-ādi-śāstravit ॥

(Rāja-Taraṅginī 4-419)

The Karatōyā is a very ancient river in North Bengal. Mentions of Karatōyā are found in the Mahabhārata (Vana-parvva, chap 85. Bhīsma-parvva, chap. 9). In 'Karatōyā-māhātmya' (an account of the merits of the river Karatōyā) we also find mention of a temple of Skanda or Kārtikēya in Paundra-vardhanapura —

"Skand-ādi Viṣnu-Balabhadra-Siv-ādi-dēvair-adhyūṣitaṃ kara-jālamvu-vidhūta-papam Srī-Paundra-vardhana-puram śirasā namāmi । 24 "

Vatēśvara-Śiva—There is still a Śiva-liṅga called Vatēśvara-natha at Colgong in the Bhagalpur district It is a railway station on the loop line of the East Indian Railway The place is not far from the border of the Birbhum district in Bengal The fort of Garhi near it was looked upon, says Mr. Blochmann, as the entrance or key, to Bengal—a position which Muhammadan historians compare with that of fort Sahwan on the Indus, the key of Sindh. (J A.S B, 1873, p 322) Rai Saheb Nagēndranātha Vāsu says that the liṅga perpetuates the memory of Vatēśvara Mitra, an Uttara Radhiya Kāyastha, who gave his daughter in marriage with the Maharajā Vallāla Sēna and was made the governor of Magadha. But he has not given any reason for his thinking so It is not unlikely that the liṅga has been in existence from a long time past (J P A.S B 1909, p 10)

We have shown that all the reasons given by Professor Goswami were in existence in Bengal. We shall now add some more to show that it is more probable that Visakha Datta was a native of Bengal. The names of the three generations viz Viśākha, Prithu and Vaṭēśvara sound more like Bengali names than those of the people of other provinces of India. We have already mentioned the name, Vatēśvara Mitra. We find the name of a 'Vatēśvara Śarmā' in the Manahali copper-plate grant of king Madana-Paladēva of Bengal (J.A S B., 1900, p. 72) The name of Prithu is, perhaps, a contraction of Prithvīdhara or of some such name with Prithvī as the prefix. This name is not un-common in Bengal.

Viśākha Datta's grandfather was a feudatory king Feudatory kings with the surname of 'Datta' were very common in Bengal from the fifth century A C. In the Dāmōdarapura copper-plate grants we find the names of Uparika Cirāta Datta, Uparika Mahārāja Brahma Datta and Uparika Mahārāja Jaya Datta, who were all feudatory chiefs of Puṇdravardhana under the Guptas. In the Ghugrāhāṭi copper-plate grants of the sixth century A.C. mentions have been made of Mahāraja Sthāṇu

Datta and Antarañga-uparika Jiva Datta. (J.P.A.S.B 1911) Lastly some identify Ganēśa Datta-khān, an Uttara-Rāḍhiya Kāyastha of Dinajpur in North Bengal with Mahārājā Ganēśa who became an independent king of Bengal in the beginning of the fifteenth century A C The mahārājas of Dinajpur are said to be the descendants of this Datta dynasty

In some manuscripts of the Mudrā-Rākṣasa, the reading of Avantivarmā has been found in the last line of the last ślōka in place of Candragupta. Prof. Goswami thinks that this Avantivarmā might be the father of Grahavarmā, the brother-in-law of Mahārāja Harṣavardhana. He supposes that this Avantivarma had perhaps the kingdom of the western Magadha under him and was the overlord of Viśakha Datta He perhaps, with a view to please his overlord, put Avantivarmā's name in place of Candragupta Professor Goswami assigns the time of the Mudra-Rākṣasa to the latter part of the seventh century or the beginning of the eighth century A C But Grahavarmā succeeded his father and was killed at about (605 A C) His father Avantivarmā can not, therefore, be present towards the end of the seventh century or the first part of the eighth century We shall, therefore, have to find out some other Avantivarma who was present towards the end of the seventh century or the beginning of the eighth century Another Avantivarmā was the king of Kasmir a great patron of learning but he had no dominions in Northern India or in Bengal Besides he reigned in the latter part of the ninth century (855–883 A.C.) Who this Avantivarmā might then be ? Although the history is silent about any descendant of Bhāskara Varman of Kamarūpa the reference to the Varāha Avatāra leads us to think that this Avantivarmā might be the immediate descendant of Bhāskara Varman, who claimed his descent from the Varāha Avatara That Bhāskara Varman had his sway over the northern Bengal is evidenced by the fact that he had issued his Nidhanapur copper-plates grant from his victorious camp at Karna-suvarna in Bengal, (*Ep Ind.*, Vol XII).

In the first act of the Mudra-Rākṣasa we find that Nipuṇaka, the spy of Cāṇakya adopted the disguise of a showman of Yamapata, a scroll depicting the punishments awarded by Yama, the god of death to the different kinds of sinners The profession of earning money by showing Yamapata is still followed in the district of Birbhum in Bengal Mr Gourahari Mitra wrote in the Bengali magazine 'Pravāsī' of the month of Āśvina last, that the patuās (painters) of Birbhum prepare a scroll of about 25 to 30 cubits long by giving a thin coating of mud on cloth On it is pasted paper depicting the exploits of Rāma and Kriṣna, society sketches and scenes from hell (yamālaya) showing the tortures of the sinners They earn their livelihood by showing these pictures to the villagers and explaining them by singing songs of their own composition In this

way they impart secular and religious instructions to the people. An account of the exhibition of 'Yamapaṭa' also can be found in Bāṇa's Harṣa-carita. (Cowell and Thomas pp. 119 and 136). This shows that the practice of earning money by exhibition of 'Yamapaṭa' was much prevalent in the seventh century *i.e.*, when Viśākha Datta lived

Until no evidence to the contrary is forthcoming, we hope, we shall not be wrong to claim Viśākha Datta to be a Bengali.

# The House of Tughlaq

*(From the Tarikh-i-Mubarakshahi)*

By K. K. BASU, T. N. J. College, Bhagalpur

ACCOUNT OF SULTAN LÁ 'AZAM ABU MUZAFFAR SULTAN FIROZ SHAH, May God bless his sepulchre!

Parentage and character of Firoz Shah

He was the son of *Sipehdār* Rajab, the younger brother of Sultan Ghazi Ghiāsud-din Tughlaq Shah. When the Holy and the Great God, munificent in gifts and bestower of sovereignty, conferred kingship upon this Emperor (Firoz Shah), of habits angelic and qualities Muhammad-like, gentle, kind and just, every act of oppression, tyranny, highhandedness, violence and excesses that had been manifest in the reign of the deceased Sultan Muhammad Tughlaq, was substituted for justice and equity, the adornment and exaltation of the country, and the safety of the roads There was an abundance of learning (in the country), and a great many theologians and holy persons appeared (in his reign).

His accession.

On the 23rd Muharram [1] of the above year (752 H. 1351, A D.) he (Firoz Shah) ascended the throne on the bank of the Sindh.[2] People flocked to his court from all sides; the chiefs and the nobles, fully and wholeheartedly, acknowledged his authority and approved of his actions.[3]

The Imperialists were harassed by the Mughals.

The Sultan drew up his forces as usual,[4] and having made up his mind to proceed to Delhi on the following day arranged his troops. On that day the Mughals, who had come in (Sultan's) aid, having joined themselves with Nauroz Gurgin, fell upon the royalists.[5] A firmān was issued ordering that the baggage-train should be carried forward

---

[1] Afif, Zia Barni and Nizamuddin write 24th Muharram.

[2] On the demise of Muhammad Tughlaq the army that had been led by him to Thatta fell into utmost disorder, and was assailed by the Mughals in front and the rebels of Thatta in the rear. As there was no one possessing the ability to redeem the soldiers from the hands of the Mughals, the chief men of the army entreated Firoz to ascend the throne.

[3] بیعت عام کردند و موافقت نمودند    [4] برسم طوبل فرود آورد

[5] MS. reads—همان روز مغلان که برای صود آمود بودند باشتغال نوروز کده کز (؟) صفها کشیر اتفاق جنگ کردند *

along the river Sindh with forces on both its sides. When the Mughals appeared they were put to distress by the imperialists, and the latter made a further advance. Being defeated the Mughals retired to their countries. The Sultan by continuous marches arrived at Siwistān and recited the *Khutbā*[1] in his name on Friday.

Defeat of the Mughals.

It was during this expedition that Malik Ibrahim obtained the office of *Naib-i-bārbeg*, Malik Mashira[2] was invested with the post of 'Ariz (-i-Mulk) and he received the title of 'Imādu-l Mulk. From that place was sent Kamru-d-din, the Secretary of late *Maliku-sh Shark* Malik Kabir, to Guzarat, the country of Bahram Ghaznin. Malik Noor,[3] the *Sar-dawat dar*,[4] Malik Nua, Sheikh Hasan Sarbarhanah and other Maliks who remained there were rewarded with special robe of honour and excessive favours. Said 'Alauddin Rasuldar and Malik Saifuddin, the Superintendent of the elephants were sent against Khwaja Jehan at Delhi. Moulāna 'Imād and Malik 'Ali Ghori were deputed against Taghi, the chief of Sindh and Thatta. Other officers marched against Khudawand Zādā Kawamu-d-din and 'Ainu-l Mulk at Multan; and some against Malik Mahmud Beg at Sannam, and some to other districts and towns. A general firmān was issued to the various parts of the Kingdom granting compassion, favour and education to the subjects. The Coffin of Sultan Muhammad was placed on an elephant with the royal umbrella over it, and taken to Delhi with successive marches.

Conferment of presents on the members of the court at Siwistān

In order to convey the news relating to the demise of Sultan Muhammad, Malih, a slave of Khwāja Jahān, set out (from Thatta ?) on the third day, and reaching the city (Delhi) carried the intelligence to his master.[5] Struck with wonder, and without careful investiga-

Khwāja Jahān sets up the son of the late Sultan Muhammad Shah, 3 Safar 752 H

Nizamuddin gives a more detailed account in his Tabaqat-i-Akbari. He relates that after the death of Muh. Tughlaq when confusion overtook the army, Malik Firoz considered it advisable that he should * * separate the 3,000 Mughal horsemen, whom Amir Kazghan had sent to assist Sultan Muhammad, from the main army, so that it might be saved from their depredations. * * * Two days after Sultan Muhammad's death Nauroz Gurgin, the son-in-law of Barmah Shirin, who had been brought up by Sultan Muhammad, ungratefully joined the Mughals, and incited the latter to stretch their hands to ravage * * *.

[1] *Khutba* or *Khutbet*, the two synonymous terms refer to the oration delivered every Friday after the afternoon service, in the principal Mahommedan mosques in praise of God, the Prophet and his descendants. This was pronounced in former times by the reigning Khalif, or the heir-apparent.

[2] Afif reads شیدادو حشم (Bib. Ind., p. 48). Elliot (III, 277) has Shirābrū chasm.

[3] MS illegible.

[4] Keeper of the seals.

[5] Afif narrates that a slave named Malik Tūntun (Zia Barni

tion or consideration, Khawaja Jahān brought out a youth of obscure origin,[1] describing him as a son of Sultan Muhammad Shah With the consent of *amirs* and *maliks* of Delhi, he placed him on the throne, on the 3rd Safar of the afore said year, under the designation of Sultan Ghiyāsud-din Mahmud, and himself managed the affairs of the Kingdom Saiyid Rasuldar and Malik Saifud-dīn reached Delhi and showed the auspicious firmán of the Emperor (Firoz Shah) to them (Khwāja Jahān and his associates) As Khwāja Jahān had undertaken the work without any proper thought, he perforce, persevered in his actions. Some of the *amirs* and *maliks*, such as, Malik Natho, the chamberlain, Aãzam-i-mulk Hisāmuddin, Sheikh-Zādā Bustāmī, Mālik Hāsan Multani, and Malik Hisāmuddīn co-operated with him; while others, e.g., Sharfu-l Mulk, Malik Zablān, Amir Kutba'h, Malik Khaljin, Malik Hasan, *Amir-i-miran*, Kazi Mir, Khwāja Bahaud-dīn Thikra, Malik Muntakhab Balkhi Malik Badrud-dīn Naubahārī secretly sent petitions expressing terms of sincerity to the Emperor, may God exalt him! Khwāja Jahān invited Mahmud Beg from Sannam, but the latter showed his negligence, and sent a petition guaranteeing help to the King (Firuz Shah) Letters had also been despatched to Khudawand-zādā Tarmud and 'Ainu-l Mulk at Multan but they transmitted this letter of Khwāja Jahān to the Emperor, who (thus) became apprised of Khwāja Jahān's enmity. Khudāwand-zadā and 'Ainu-l Mulk were honoured with compassion and special presents from the King for their having joined the imperialist cause.

Learning that the King was approaching against him with continuous marches, and that a large number of men had flocked to his standard, Khwaja Jahān sent as messengers, Saiyid Jalālu-d-dīn Karmati,[2] Malik Dhilan,[3] Moulānā Nazmu-d-dīn Razi, Daud, and Moulānā Zādā[4] (for the purpose of explaining to Firoz Shah) that the empire was still in possession of Sultan Muhammad's family; that Firoz Shah should accept the office of deputy and the heirship and devote himself with energy to the performance of the affairs of the empire; and further that, he (Firoz) might choose some of the *ikta's* of Hindustan and any noble whom he might select could join him

---

Altun) had been sent from Delhi by Khawaja Jahān to Sultan Muhammad (at Thatta ?) and just on the Sultan's death, he started on his return journey to Delhi.

[1] Sir Wolsey Haig is of opinion that there is much to justify the belief that the child was Muhammad's son and that the allegation that he was not was an attempt by panegyrists to improve their patron's feeble hereditary title. *Cambridge History of India*, III, 174 *Journal Royal Asiatic Society*, July, 1922.

[2] MS illegible T.A. (for Tabaqat-i-Akbari), (Bib Ind), 242, Sayyad Jalāl.

[3] MS reads ريلان: T.A. (*ibid*), 242, Malik Dhilan.

[4] T.A. (*ibid*.) has "his own Moulānā Zādā."

On the arrival of the afore-said embassy, Firoz placed it under guard, and summoning together the chief of the Sheikhs, Kutubu-l Aulia Nasiru-l Huq-u-Shara'au-d-dīn,[1] *may God have mercy on him*, Moulānā Kamālu-d-dīn Sāmāna and Moulānā Shamsu-d-dīn Bākharzī[2] explained to them thus, "Thou dost all know how I was the favourite of the late Sultan, and further, thou must have heard how Khwāja Jahān has placed on the throne a young lad as the *soi-disant* son of Sultan Muhammad; if the late Sultan had any issue left I might have been in the know, and if he had any son he must have had placed him under my guardianship, for, none was a better patron or a friend of his than I Him (the false heir) has the Khwāja placed on the throne and the people of Delhi have accepted him as their ruler." In conclusion the Sultan enquired, "What in your opinion is the exigency of the hour, what do you advise me to do, and what is the proper step to be taken (now)?" Thus replied Moulānā Kamāluddīn, "Whoever has undertaken the duties of the empire ever since the beginning has the priority of claim, and he is the sovereign"

The emissaries who had arrived, such as, Saiyid Jalāluddīn Karmati, Moulānā Nazmud-dīn Razī and Malik Dhilan remained near Firoz Shah, while (Sheikh) Daud and Moulānā Zādā returned to Khwāja Jahān A firmān was issued stating that if Khwāja remembers his obligations to the Sultan for the latter's having conferred upon him the favours and his past services he would do well to give up his opposition caused by his foolishness and aberration and to betake himself to the path of obedience, as in that case more favour would be shown to him and his faults and sins condoned Returning to Delhi, (Sheikh) Daud brought the (above) firmān to Khwāja Jahan who, (notwithstanding the Emperor's attempt to bring about a reconciliation) increased his vigour, magnificence, strength and opulence; the people joined him from all sides

Meanwhile Abu Muslim, Malik Shahīn Beg, sons of Malik Mahmud Beg came to the Sultan with their petitions and presents, and were favoured with (royal) compassion. When the Emperor arrived at Sarsuti,[3] Malik Kawamu-d-dīn[4] arming himself came out of Delhi at the time for the meridian prayers, on Thursday, the last day of Jamadiu-l-akhir of the same year, with his equipage, attendants and harem, and sought refuge from the Emperor Amir Mu'aazm Kutbgha, too, joined Kawamu-d-dīn, and his couriers came to the Sultan at Fatha-

---

[1] T A reads Sheikh Nasirud-din Muhammad Auhdi

[2] MS reads اخدری ; T.A. reads Bākharzī.

[3] "It is 90 *Kos* from Delhi," Afif: In the course of his progress from Thatta to Delhi, Sultan Firoz Shah took the route by Dipalpur, Multan, Ajodhan and Sarsuti

[4] Kiwamu-l Mulk, Afif (Ell. III, 283); He was also called Malik Maq-

bād[1] on the same day. It was here (Sarsuti) that tidings arrived of the birth of Shāhzādā Fath Khān, and the news of the death of Taghi (also) reached him (the Sultan) there from Guzarat On the day following, as Kiwāmu-l Mulk had come out, Khwāja Jahān, of necessity, went near the Sultan, and alighting himself at *Hauz i Khass*[2] appeared with the adherents before the Sultan at Hansi, and stood concealed before the assembly with turbans round their neck.[3] The Emperor ordered that Ahmad Ayaz (Khwāja Jahān) should be made over to the *Kotwāl* of Hānsī,[4] and Malik (Ghijasu-d-dīn) Khitāb should be conveyed to Tabarhind;[5] Nathu, the chamberlain, was exiled to Sannām, and Sheikh-Zadā Bustamī was ordered to leave the country. Hisāmud-dīn (Uzbek)[6] was kept detained by the general of the army.

Firoz's arrival at Delhi and his accession

In the month of Rajab of the aforesaid year (752 H., September 1351, A.D) the Sultan entered Delhi The people welcomed him and received royal favour (in return). At the fortunate aspect of the stars, the Emperor alighted at the palace of Khātūn on the 2nd Rajab (August 1351 A D.) and engaged himself in carrying the administration of the state and looking after its welfare.[7]

In the same month (Rajab, 752, H.[8]) Firoz Shah marched towards the Sirmur[9] (hills), and after a lapse of four months he came back to Delhi

---

but He was the ablest noble in the Kingdom, and was a Brahman of Telingana who had accepted Islam.

[1] Fathabad was the name given to the newly constructed city at the site of Ikdar where the crown-Prince Fath Khān was born. Elliot III, 283.

[2] Afif, *Hauz-i-Khās-i- Alā*

[3] Afif writes, "Khwāja wont into his presence with a chain around his neck, his turban off, a *talika* on his head, and a naked sword fastened to his throat, and took his standing low down among the attendants"

[4] Tabakat-i-Akbari (Bib. Ind., 243) Badaoni (*ibid*., 243), and Firishta (Briggs I, 448) agree in saying that Khwāja Jahān should be made over to the Kotwāl of Hānsī, whereas, Afif describes how the Emperor wished to re-instate Khwāja as *Vāizer*. At length, Sāmāna was assigned to him in *in'ām*, and when he had set out for that place he was beheaded by Sher Khan

[5] The boy whom Khwāja Jahān had proclaimed as Sultan.

[6] MS unintelligible.

[7] Afif writes, "The Sultan conciliated his subjects by remitting all debts due to the State; reduced the demand on account of land revenue, abolished levying of benevolences and the vexatious cesses; appeased with gifts the heirs of those who had been executed in the late reign, etc. etc."

[8] Badaoni gives 753 H., T A. gives 5th Safar, 753 H., Firishta writes 5th Safar, 754 H. The Sultan went there for excursion and sports

[9] In the Punjab, bet. 30' 20' and 31° 5' N. and 77°5' and 77°55' E. on the west bank of the Jamuna and south of Simla.

Birth of second prince Muhammad, 3rd Jamadiu-l awwal. June 5

On Monday, the 3rd Jamadiu-l awwal,[1] of the year, Prince Muhammad Khan[2] was born. When this joyful and happy tidings and auspicious news was conveyed to His Majesty, he signalised the birth of the prince with feasts and rejoicings. This prince was born during the period of the Sultan's sovereignty, and from the day of his birth the prosperity and splendour of the empire were on the increase.

The Sultan proceed to Kalanor

Upon the whole, a few months later, of the year, His Majesty marched towards Kalanor, and hunting in Makh Jahur retraced his way to Delhi.

Construction of edifices and conferment of titles, etc., on Amirs

The same year the Sultan laid the foundation of the Jami'a mosque near the palace and a madrassa on the *hauz-i khāss*![3] He conferred the title of Sheikh-ul-Islam on Sheikh-Zāda Sadruddīn,[4] grandson of Sheikh Kabir Kutubu-l Auliau-l Huq wa Shar'au-d-dīn Zakariah, may God have mercy on him; Kawāmu-l Mulk Malik Maqbul, the Nāib Vizier, was made the Vizier and was honoured with the designation of Khān-i-Jahān; he further, received a diploma and a gold casket. Khudawand Zada Kawāmu-d-dīn received the title of Khudāwand Khān and became the Vakildar; Malik Tātār became Tātar Khān; each *amir* obtained different kinds of umbrellas; *Maliku-sh Shark* Sharafu-l-Mulk was made Naib Vakildar; Khudāwand Saifu-l Mulk the Shikārbeg Khudawand-zādā 'Imadu-l-Mulk the chief Silahdar; 'Ainu-l Mulk received the post of Musharrif of the countries.[5]

Sultan's first expedition to Lakhnauti

In the month of Shawwāl, in the year 754 H. (December 1553 A.D.), the Sultan started with a large army on an expedition to Lakhnauti.[6] Leaving Khān-i-Jahān in charge of the State, great and small, the Sultan with continuous

---

[1] Badaoni gives the date, Rajab 753 H.

[2] Later known as Nasirud-din Muhammad Shah.

[3] Nizamuddin, Firishta and Badaoni simply write, "the Sultan laid the foundation of lofty edifices on the bank of the Sarsuti."

[4] Badaoni calls him Sheikh Ṣadrud-dīn Multāni, and says that the lofty building built on the bank of Sarsuti was given to Ṣadruddīn.

[5] Nizamuddin says that 'Ainu-l Mulk received the post of *Mustaufi* and *Musharraf of the Diwān*

[6] In 1345 Hāji Iliyās, styling himself Shamsu-d-dīn Iliyās Shāh had made himself master of W. Bengal, and after having overthrown Ikhtiyāru-d-dīn Ghāzī Shāh, the ruler of E Bengal in 1352, established his dominion over the whole of Bengal. The proclamation that was issued by Firuz Shah in 1353 A.D. explained the cause of the invasion to be the wrongs and oppressions of Haji Iliyās. See *J.P.A.S.B.*, XIX, 1923, No 7, pp 253-290.

marches reached his destination.[1] On the King's arrival in the neighbourhood of Gorakhpur, Udaya Singh waited upon him, and having presented a *lac* of tankas and two elephants became the recipient of imperial favour.[2]

Udaya Singh of Gorakhpur submits.

On the 7th Rabi'ul Awwal,[3] the Sultan arrived at the fort of Ikdāla,[4] and there was a great battle The Bengalis were slain, and the casualty was very great. Shahdeo,[5] their chief, with several others was killed on that day On the 29th of the month, the Sultan left the place, and encamped on the bank of the Ganges Iliyās Hājī took refuge in the fort (of Ikdāla), and on the 5th Rabi'ul Ākhir, he marched out at the time for the meridian prayers with his equipage, attendants, and countless Bengalis

The Sultan drew up in order of battle, and immediately as Hājī perceived it, he was alarmed and fled.[6] The imperialists made a hot pursuit and laid their hands upon the canopy and forty-four elephants. and a large number of Iliyās' horse and foot was made food for the sword The Sultan halted there for two days,[7] and on the third day, he made his way to Delhi[8] Some months afterwards, His Majesty laid the foundation of the City of Firozābād,[9] May Allah protect it from all evils!

Flight of Iliyās Hājī.

Foundation of Firozābād.

---

1 Afif writes, "the Sultan followed by way of Champaran and Rachap:" Barni says, "the march was through Gorakhpur, Kharosa, and Tirhut

2 Nizamuddin writes, "Ray Kapur, also, paid the tribute of several years, and both of them (Kapur and Udaya Singh) joined the army.

3 MS. reads 28th Rabi'ul Awwal. Firishta (Brigg I, 449) and Nizamuddin (Bib Ind., p 245) write 7th Rabi'ul Awwal. We have adopted the latter version.

4 Iliyās who had rashly invaded Tirhut with the object of annexing the s. eastern dists. of the Kingdom of Delhi, retired, at the approach of Firoz, to his own capital Pandua, and thence to Ikdala.

Westmacott, in Calcutta Review (July, 1874) places Ekdalah (Akdalah) some 42, m. on the Maldah side of the river Tangan and North of Gaur and Lakhnauti. Major Raverty (Tabakat Nasiri, Bib. Ind , p 591, f.n ) identifies Akdalah with Damduma, a corruption of Damdamah, in the pergh. of Debekote, between Lakhnauti and Dinajpur. Wolsey Haig places Ikdāla on the island in the Brahmaputra (*Cambridge Hist. of Ind* , III, p. 176).

5 There is no mention of Shahdeo in Nizamuddin, Badaoni, Firishta, and Afif.

6 A detailed account of the battle has been given by Afif.

7 Afif says that, the new names which the Sultan gave to Ikdāla and Pandwah were Azādpur and Firozabad respectively.

8 "The rains having commenced, Firoz Shah had to abandon the investment, came to terms with Iliyās and retired towards his own dominions by the Manickpur ferry." Afif.

9 The Sultan returned to Delhi on the 12th shaābān 756 H. (July 12, 1355 A.D.).

This Firozābād was different from its name-sake which arose from

Construction of Canals.

In the year 756 H. (1355 A.D.) the Emperor went[1] in the direction of Dipalpur, and excavating a canal from the Sutlej[2] took it to Jhajhar,[3] a distance of 48 Karohs. The next year, he excavated a canal from the river Jun in the vicinity of Mandal[4] and Sarmur;[5] and uniting seven other canals with it, took it as far as Hansy[6] From that place he extended it to Alisin[7] and there laying the foundation of a strong fort, gave it the name of Hisar Firozā.[8] Below the Kiosk an extensive reservoir was constructed which was filled up with water from that channel. Another canal was excavated from the Khakhar (Ghaggar), and conducting it past the fort of Sarsutī was taken to Harni-Khirah[9] In between these canals he (the Emperor) erected a fort, and called it Firozabad. Another aqueduct was drawn from Badmani[10] and conveyed to Jaun, thence to

---

the change of name of Pandūah This new town situated on the banks of the Jumna, occupied the sites of the old town of Indarpat and 11 other villages or hamlets, and contained no fewer than 8 large mosques

[1] "Went to hunt," T.A. (*ibid*, 245)

[2] T A "Satlad". Firishta, "Sutloog."

[3] Badaoni, "Jahjar" Firishta, "Kugur". Jhajjar, a town within 40 m. of Delhi, in the Rohtak dist Punjab

[4] MS منوتی. Firishta, "Mundvy"; Badaoni, Mandūi or Mandilī, T.A "Mandal". Elliot, "Mandatī" Mandawi a village in Karnal dist Punjab, on the route from Hansi to Ludhiyana. and 51 m north of the former town It is situated on the left bank of the Gaggar Distant N.W. from Cal. 1027 m Lat 29 48′, Long, 76′ 3′.

[5] Badaoni, "Sarūr," Firishta, "Surmore": T.A. "Sarmur"

[6] Hissar dist Punjab, Lat 29 6′ 19″. Long 76 0′ 19″.

[7] MS. اراسنی: Elliot, "Araman". T A, "Alsin" Badaoni, Rās Firishta, "Raiseen". Afif, "Laras."

[8] The foundation of Hissar was laid on the sites of two villages, Laras-i-Buzurg and Laras-i-Khurd.

The city and the fortress stood in the midst of a sandy desert, and was ill supplied with water. It was to remedy this defect in the city which Firoz proposed to build here, that he caused canals to be drawn to it

The western Jamuna canal, an important perennial irrigation work in the Punjab, taking off from the west bank of the Jamuna and irrigating Ambāla, Karnal, Hissar, Rohtak, Delhi Dists, and parts of Patiala and Jind was originated by Firoz Shah who utilized the torrent bed known as the *Chautang* to conduct water to the royal gardens at Hissar and Hansi But after 100 years its water ceased to flow farther than the lands of Kaithal, and Akber re-excavated the work of Firoz in 1568. In the reign of Shah Jehan, his engineer, Ali Mardan Khan, undertook a more ambitious scheme, and took the water through Panipat and Sonepat to Delhi.

[9] Elliot, "Harbi Khira" or Harī Khirā. T.A (245) "Karah" Badaoni, "Harnī Khirā", Firishta (Brigg· 449) "Pery Kehra" Iswari Pd. Mediaeval India, "Hari Khirā" or "Bherni-khera." Renell says (p. 73) after the meeting of the Setledge and the Beyah, the name of Setledge is no more heard of (above Multan at least,) that of *Kerah* being the name of the confluent waters."

[10] T.A. (ibid., 245). "Budhi" (river): no reference of this either in Firishta or Badaoni.

Firozah, and into a reservoir, and further to a point beyond it.[1]

Arrival of a robe and diploma from the Khalif of Egypt

In the month of Zilhijjah (January) of the same year (757 H., 1356 A.D.). on the day of 'Id-uz-hia,[2] a robe of honour and a diploma[3] arrived from the Khalifa Al-Hakim bi amrillāhi Abūl Fath Abū Bakr ibn Abīl Rabī' Suleimān, the Khalif of Egypt,[4] confirming the committal of the countries of Hind.[5]

Arrival of an embassy from Lakhnauti

* * * The same year, there also came the plenipotentiaries from Iliyās Hājī of Lakhnauti with valuable presents. They became the recipient of excessive favours and endless affections, after which they returned. On another occasion, there (again) came presents from Iliyās Hājī, and (the envoys) kissed the royal feet at Hissar Firozah. Thus the Sultan addressed them, "My humble servants possess better effects than those that you have brought here: henceforth, you should bring such picked elephants which a King should present to a brother King".

Arrival of Zafar Khān from Sonārgaon

In the year 758 H (1358 A.D.) Zafar Khān Fāzri[6] came from Sonārgaon * * (with two elephants and attached himself to the court. He was received with favour and received the office of Naib Vizier).[7]

---

1 Afif is very concise in his statement of Firoz's canals, and refers only to the two canals, the one from the Jamuna to the city (Hissar Firoza ?) and the other from the Sutlej to the above place. the former called *Rajiwah* and the latter *Alagh-Khānī*, and both passing through Karnal. Being an inhabitant of Sirhind, and probably possessing more geographical knowledge of the Canals, Yahiya has given an account of the canals with greater detail The later historians, such as, Nizamuddin, Firishta, and Badaoni have followed Yahiya.

2 عىدصحىة an error for عبدالصحى.

3 دشور an error for منشور.

4 MS. reads دارالخلافة و مصر, Here و should be deleted

5 Afif is reticent on this incident, whereas Nizamuddin (ibid , 245). Badaoni (ibid., 245), and Firishta (ibid , 450) all agree with Yahiya

* * * Portion within the asterisk has been omitted in Elliot.

6 MS. reads. ظفر خان محمد كز فارسي. We have followed Nizamuddin. (ibid., 246). Firishta (ibid., 450) writes Zafar Khan Farsy.

* * Here begins the most grievous error of the copyist of the MS The transcription has been most wrongly done, *e.g.*, Zafar's arrival from Sonārgaon is to be found in p. 146 of the MS. and the subsequent events have been narrated in the following order, pp. 156, 157, 158, 151, 152, 153, 154, 155, 148 (line 7), 149, 150, 145 (line 15), 146, 147, 148, 158 (line 2).

7 The MS. being not clear the bracketed portion has been taken from Nizamuddin. (T.A. ibid , 246). Badaoni makes no reference of this event: Afif, Yahiya, Nizamuddin, and Firishta are almost unanimous, and of these Afif is more elaborate. The latter gives in detail the circumstances that led to the arrival of Zafar Khan to seek the protection of

The Emperor marches to Samāna for hunting.

In Zilhijjah of the year 759 H. (1358 A.D.) the Sultan started towards Samāna, and there engaged himself in hunting.[1] Meanwhile there came advices that an army of Mughals had arrived on the frontier of Lahore Malik Qabūl *Sarbardadār*[2]

Retreat of the Mughals from Lahore.

(lord of the bed-chamber) was ordered to proceed with an army against them, but the enemy, before his arrival, retreated towards their own country. The Sultan returned to Delhi

Exchange of presents with Lakhnauti

About the end of the year, Tajuddin Betāh[3] came from Lakhnauti with some other amirs as ambassadors, bringing with them articles as tribute, and were honoured with the royal favour[4] In return, the Sultan also sent Turkish and Arabian horses, fruits from Khorassan, and every kind of other presents under the charge of Malik Saifuddin the keeper of the (royal) elephants, who accompanied Malik Tajuddin to Sultan Shamsud-dīn at Lakhnauti. Arriving at Bihar (the party) learnt

Death of Shamsuddin of Lakhnauti and the accession of his son Sikandar

that Shamsud-din had expired, and that his son had become king under the title of Sultan Sikandar.[5] The envoys from Lakhnauti were detained at Bihar, and the event was notified to the Emperor The Sultan ordered that the presents which had been sent to Sultan Shamsud-din should be brought back; the horses should be made over to the army at Bihar and the ambassador (from Lakhnauti) should be conducted to Karah. The firman was carried out to the letter[6]

In the year 760 H. (1359 A.D) the Sultan marched towards Lakhnauti,[7] leaving Khan-i-Jahan at Delhi, and after

---

Firoz Shah (*See* Bib Ind., p 137 etseq · Elliot, III. 303) After the murder of Sultan Fakhruddin, King of Sonargaon, at the hands of Shamsuddin, Zafar Khān, the son-in law of the deceased sovereign was sore distressed, and fled to Thatta and Delhi enroute Hissar Firozāh, to seek the protection of the Emperor.

[1] Afif has passed over this incident But Nizamuddin, (T A ibid, 246). Badaoni (Bib Ind, 246, Ranking I 328), Firishta (Brigg I. 451) all agree with Yahiya.

[2] Afif, Toraband

[3] T. A. simply Tajuddin · Badaoni and Firishta give no name,

[4] There is no reference of Tajuddin's embassy in Afif. But Nizamuddin, Badaoni, and Firishta all agree with Yahiya.

[5] Firishta, "Sultan Shah Poorbea".

[6] Afif (Bib, Ind. 100-105; Elliot III 290-92) narrates another event of importance which took place in 1358 Yahiya, Nizamuddin, and Badaoni are all reticent. In 1358 Khudawand Zāda, the Emperor's cousin and her husband formed a plot against the life of Firoz Shah, but it was frustrated by her son. The cousin was imprisoned and her husband banished.

[7] The Sultan, by his action, broke the sanctity of the treaty made with Sikandar's father, and invaded the dominions of his son on the frivolous ground of vindicating the rights of Zafar Khān

deputing Tatār Khān to proceed from Ghaznīn to Multān.[1] When the Sultan reached Zafrabād, the rainy season set in, so he made a halt. At this place, A'ẓam Malik Sheikhzāda-Bisṭāmī, who had been banished by the Sultan,[2] brought a robe of honour from the Khalif of Egypt, and the Emperor being graciously disposed towards him, dubbed him, A'ẓam Khān.[3] Saiyid *Rusuldār* was sent with the messengers of Lakhnauti to the Sultan Sikandar, and the latter despatched five elephants and other costly presents to the court with the Saiyid. Before the arrival of Saiyid *Rusuldār*, 'Alam Khan had come as an ambassador, and to him a firmān had been issued to the effect that the Sultan Sikandar was foolish and inexperienced and had strayed from the path of rectitude. The Emperor had, at first, no desire to draw the sword against him (Sikandar), but as the latter had not discharged the duties of obedience, he must now understand that His Majesty was marching against him. Firoz Shah, when the rains were over, shaped his course for Lakhnauti, and, while on the way, conferred the ensigns of royalty, such as elephants and a red pavilion on Prince Fath Khān, and directed coins to be struck in his (Prince) name and officers[4] to be appointed under him. When the Emperor arrived at Panduah,[5] Sultan Sikandar shut himself up in the fort of Ikdala, whither Shamsuddin, his father, had been in the habit of going for refuge. On the 16th Jamadiu-l awwal, 761 H., (5th. May, 1360.) the Emperor encamped at Ikdala. When the seige had been continued for sometime, the garrison, perceiving the futility of their opposition to the assailants capitulated in lieu of despatching elephants,[6] treasures and goods as tribute. On the 20th. Jamadiul awwal of the year, Firoz Shah marched out from Ikdāla on his return journey, and on his reaching Panduah, Sikandar made him a present of thirty-seven elephants and other valuable articles.

Firoz Shah's second expedition to Lakhnauti.

Arrival of a dress from the Egyptian Khalif.

Sikandar takes Shelter in Ikdala

---

[1] The text in the MS gives no sense. تاتار خان را از حد ولایت غزنین تا ملتان شقدار کردہ آنجا داشت . Elliot (IV. 9) writes, "…. and Tatar Khan as *Shikkdar* at Multan (to guard) the Ghazni frontier." We have followed Badaoni (Raverty I. 328)

[2] The fault being that he had become intimate with Ahmad Aiyāz.

[3] Firishta, 'Azim i-Moolk'

[4] Firishta writes "tutors".

[5] Firishta, "Bundwa".

[6] Firishta says," that Sikandar sent 48 elephants. Badaoni writes, "thirty-seven elephants". Nizamuddin states, "the Sultan agreed to send a yearly tribute of elephants". Afif writes that on the conclusion of peace between Sikandar and Firoz Shah on condition that Zafar Khan

The Emperor returns via Jaunpur, Bihar, and Jajnagar.

With continuous marches[1] His Majesty arrived at Jaunpur,[2] when the rains having commenced, he quartered his army there. After the expiry of that season, in the month of Zil-hijjah of the same year, the Emperor moved by way of Bihar to Jājnagar[3] A firmān was issued that the baggage-animals, the women, the disabled horses, and the old men should not proceed. He left Malik Kutbuddīn, the brother of Zafar khān, the Vizier, at Karra[4] with elephants and baggage, and hastened forward; on reaching Satgarh[5] he plundered it, and its ruler[6] fled Shakr khātūn,[7] daughter of the Rāi fell into the Emperor's hands[8] The Emperor proceeded further, and left' Imādu-l Mulk one stage behind with some attendants and baggage Ahmad Khān who had fled from Lakhnauti, and had taken shelter in the fortress of Ranthambar,[9] joined the Sultan and was honoured with great favours

Flight of the Rai of Satgarh.

---

should be placed on the throne of Sonārgāon, the Emperor sent into the fort of Ikdāla a crown worth 80000 tankas, and 500 valuable Arab and Turki horses with an expression of wish that henceforth they might never again draw the sword. Sultan Sikandar, in his turn, sent 40 elephants and other valuable presents

[1] Afif says by way of "Qanauj and Oudh'

[2] Muslim historians derive the name *Jaunpur* or *Junān-pur* from Jauna or Jaunān, the title by which Muhammad Tughlaq had been known before his accession, but the City of Firoz was not the first site. and Hindus derive the name from Jamadagni, a famous *rishi*

[3] Dr. Blochman in his "*contributions to the Geography and History of Bengal*," identifies Jājnagar with Jajpur of the present day Raverty (Tabakat Nasiri, Tr Bib Ind 588 f n) gives the following boundary of Jājnagar: on the *east*, a range of hills forming the present W boundary of *Udisah-Jagnath*, Katāsin (on N or left bank of the Mahanadi, some 30 miles east of Boada, in about Lat. 20° 32′ Long 84° 50′ being the nearest frontior town or post towards Lakhan or portion of the Lakhnawati territory: further *north*, it was bounded towards the east by the river called *Brāminy* running to the W. of Gangpur. Its *northern* boundary included Ratanpur and Sambalpur: on the *west* the river Wana-Ganga and its feeder Kahan: on the *south* Gudawari,: S. W Talinganah.

[4] T. A., "Karah Kantakh": Afif and Badaoni, Karra.

[5] T. A. "Sankrah": "Firishta "Songhur': Badaoni, "Satgarh" Elliot "Sikra": Raverty (ibid.) identifies the place with the present Sirgoojah.

[6] T. A, "Rai Sārbīn": Firishta, "Rai Sidhun": Raverty, "Rai Sāras" Afif, "Adāya".

[7] Firishta also styles her *Shakr Khatun*, signifying "the Sweet Lady". According to Raverty and Brigg "it is an impossible name for a Hindu unless she became a convert to Islam, and was afterwards so named"

[8] Ms. reads.—شکر خان دختر رای سادهن باداه بدست آمو Nizamud-din writes. The Emperor called her (*Shakr Khatun*) "daughter" and protected her: Raverty writes, "He called her daughter and adopted her". Firishta is of same opinion: No reference in Afif.

[9] Elliot, "Ranthor": Raverty (ibid. 591 f.n) "Ratanpur, in Jhar-Kundah."

The king thence proceeded to the city of Banāras,[1] the residence of the Rāi (of Jajnagar) and crossed the Mahanadi.[2] The Rāi made his retreat towards Tilang.[3] The Sultan made a day's journey in his pursuit,[4] but when it appeared that the Rāi had gone far in advance he gave up the pursuit and commenced to hunt in the neighbourhood.[5] Rāi Bir Bhān Deo,[6] sent some persons to sue for peace, (and begged) that his subjects were not killed. The Emperor, as his wont, turned aside, and (the Rāi) sent thirty-three elephants and other valuable articles as tribute. From thence the Sultan fell back and hunted in Padmawati and Param Talāo, the grazing grounds of elephants. He killed two of them, and caught thirty-three alive. Zia-ul Mulk composed the following quatrain[7].—

Flight of the Rai of Jajnagar towards Tilang.

Rai Bir Bhān Deo sues for peace

The Sultan's elephant hunt

The Shah, who with justice, to permanent power did attain,
Like the shining Sun, the environs of the world he held!
To Jajnagar he came the elephants to hunt,
Two he killed, and three and thirty Captured he[8]

From that place the Emperor came to Karah by successive marches, and continuing his progress reached Delhi, laden with victory, in Rajab. 762 H[9], (1361 A D.).

After sometime, His Majesty learnt that in the vicinity of Bardar[10] there was a hill of earth, out of which ran a stream that emptied into Satlad (Satlaz[11])· it bore the name of Sarsuti. On the other side of the mound there was another stream called the Salima[12] If the earthen dike were cut

---

[1] Afif, "Baranasi": Badaoni (Bib. Ind.) Barūni: Ranking (ibid., 329) Barūnasi: Nizamuddin Banaras: Afif states that there were two forts in Barūnasi, each populated with a large number of people: the country was prosperous with the inhabitants and spacious houses and fine gardens

[2] Badaoni, "Mahandūri": Afif "مهاندری": T. A. "Mahanadi".

[3] Talinganah: T A., and Badaoni read Tilang: Afit writes, "Rai fled to an island in the river" Firishta, "Tulingana".

[4] Afif and Nizamuddin writes that the Sultan did not pursue the Rai. Badaoni agrees with Yahiya· Firishta is also of the same opinion.

[5] During the expedition against Jajnagar the Sultan caused the idol of Jagannath to be rooted up and treated with every mark of indignity and then carried over to Delhi. Afif and Sirat i Firozshahi

[6] Firishta (Briggs 1. 452) Raja of Birbhoom: Badaoni, Rāi Parihān Deo: Elliot, Rāi Bir Bhandeo

[7] Nizamuddin and Badaoni both quote the quatrain.

[8] The copyist has made a mistake in transcribing this quatrain

[9] Badaoni and Firishta give 762 H: Nizamuddin, 772 H. In course of their progress, the Imperialists lost their way and wandered for six months; numbers perished from hardship and privation.

[10] Firishta, "Perwar": [11] Badaoni.

[12] Nizamuddin "Aslima·" Badaoni and Firishta "Salima":

through, the waters of the Sarsuti would fall into that stream (Salima) and (both) would flow through Sihrind. Mansurpur, and Sāmāna. The two streams were connected with each other, and it took sometime in cutting through the hill.[1] Sihrind and for ten *krohs* beyond was separated from Sāmāna, and put under the control of Malik Ziāu-l Mulk Shamsuddin Abū Rijā. A fort was built there and it was named Firozpur

Sihrind entrusted on Shamsuddin Aburija

*** The Sultan from thence went to Nagarkot,[2] and after conquering it proceeded towards Thatta.[3] At the time when the king reached Thatta, Jam and Babiniya[4] were in possession of the place By dint of

The Sultan marched against Nagarkot and Thatta

"Salima has received the modern name of *Khanpoor Kee Nālā* ' (Khanpur stream). Briggs (ibid.) · "Salima ' has been identified with Markanda, which rises near Nahan and flows past Shāhabad, to the south of Ambala "Cambridge Hist of Ind, III. 179 Badaoni writes ' *The Salima is also called the Sarsuti* and this river consists of two large streams which are always flowing, and situated between these two streams there is a high mound or dyke ' Nizamuddin's description is similar

[1] Nizamuddin, Badaoni, and Firishta write that 7000 spade men were engaged for the purpose and that inside the dike very large bones of men and elephants were found out the bone of a man's arm was 3 yds in length

*** Afif writes that "after the return from Laknauti, the Sultan went to Daulatabad upon a hunting expedition, and resting for a while at Biyana marched towards Nagarkot"

Here the text in the MS is not clear چوں سلطان کافر، کوہ مدکور قابل ندید.

[2] Its Raja submitted and met with royal treatment The name Nagarkot was changed into Muhammadabād after the deceased Sultan Muhammad

Afif contradicts the false statement made by the infidels that the Sultan went to see the idol *Jwālā Mukhi*, and held a golden umbrella over it. Firishta, on the authority of some historians say that the Sultan broke the idols of Nagarkot and mixing the pieces of cow's flesh, filled bags with them and caused them to be tied round the necks of Brahmins Further, that, the Sultan ordered one of the books which treated of astronomy and found in the library at Jwalamukhy consisting of 1300 vols to be translated in Persian by Izzudīn Khāni under the title of *Dalāil i Firozshahi* · other books, translated in the name of Firoz, were the science of *Pingal* (Music), *Pātur Bāzi*, (dealing with *A'khāra* or an entertainment held at night and consists of singing and dancing by females).

[3] The enforced retreat from Sind and the insolence of the Sindhis had rankled in the memory of Firuz ever since his accession He set out for the country with 90,000 horse and 480 elephants, and collected on the Indus a large flat of boats which accompanied the army down stream to Thatta.

[4] Firishta, "Jam Bany, the son of Jam Afra. Badaoni, simply Jam" "Afif" Jām brother of Rāi Unar, and Babiniya, his brother's son · Mir Masum (Tarikh i Masum, Ell I. 226) calls him Jam Babiniya. The author of Tuhfatu-l Kiram (Ell. I. 342) who says that, Jam

great exertion the place was invested, and fighting went on for sometime, but provisions and forage becoming scarce, men died of hunger, so that of necessity and after a struggle, the Sultan was obliged to retire into Guzarat.[1] The fief of Guzarat was conferred on Zafar Khān and Nizamu-l Mulk, who having been dismissed[2] (from Guzarat) proceeded with a body of men to Delhi where he was appointed Nāib Vizier of the state. After the rains when the Sultan reappeared before Thatta, Jam and Babiniya sought for quarter and waited upon His Majesty. They were taken into favour and with all the chiefs of the country they accompanied the king to Delhi On his having shown obedience, Jam was sent in state to resume his government.[3]

Guzarat was conferred upon Zafar Khān

The Sultan's reappearance at Thatta, and the submission of Jam and Babiniya

In the year 772 H. (1370-71 A.D.)[4] Khān-i-Jahān, (the Vizier) died, and his eldest son Jūnā Shāh succeeded to his titles The following year, Zafar Khān breathed his last in Guzarat and was succeeded by his eldest son[5] in the fief. Then in the year 776 H (1374 75 A D), on the 12 Safar, Prince Fath Khān died at Kanthur, for which, the Sultan was plunged into affliction, and his constitution received a manifest shock.

In the year 778 H Shamsu-d-dīn Damaghāni offered annually 40 lacs of tanks, 100 elephants 200 Arab horses, and 400 slaves children of Hindu chiefs[6] and Abyssinians, over

Insurrection of Damaghani

---

Khairuddin was the chief of Thatta, is not to be preferred to Mir Masum. The ruler was Jam Māli, son of Jam Unar, and he was assisted in the government by his brother's son, Babiniya Cambridge Hist of Ind., III, 180

[1] "Where his troops might recruit their strength and replace their horses." C.H I, III., 180

Afif here desribes how the Imperialists fell into the Kach ran (the Ran of Kach), how there were lamentations of the soldiery, and the anxiety of the Sultan, and finally how the supplies were sent by Khan-i-Jahan to the Sultan

[2] As Nizamu-l Mulk had failed to send either guides or supplies to the Imperialists when they suffered during their course of progress in the Ran of Kach he was dismissed from his post - the commandant at Guzarat.

[3] Afif states that the son of Jam, and Tamachi, brother of Babiniya, were placed over Thatta and titles were conferred on them The Sultan then marched for Delhi, taking Jam and Babiniya with all their establishment in his train. But Mir Masum, agreeing with Yahiya writes that Jam Babiniya after remaining in the Sultan's retinue for sometime was restored to the government of Sindh. The author of *Chachnamah* is also of similar opinion

[4] Firishta (ibid., 455) gives 774 H: Badaoni (Bib Ind. 250: Ranking I. 333) agrees with Yahiya.

[5] Firishta (ibid.) calls him Darya Khan: Acc. to Firishta Zafar's death took place in 775 H.

[6] Ms. reads مقدم سچکان: Badaoni, "Muquddam Zādas".

and above the present payment for Guzarat. The Sultan ordered that if the present deputy-viceroy of Guzarat, Ziau-l Mulk Malik Shamsuddin Abu Rijā [1] consented to these enhanced terms, he should be continued in office. Knowing that he could not pay them, and that Shamsuddīn Dāmaghāni had put forward an extravagant offer, Abu Rijā did not agree to the proposal; Dāmaghani then received a golden girdle and a silver palanquin and was appointed governor of Guzarat.

Reaching Guzarat, wild dreams and perverse thoughts entered his brain, and he raised the banner of insurrection for he found that he was unable to fulfil his promise. At length, the *Amīrs* of Guzarat [2] such as Malik Sheikhu-l Mulk Fakhru-d-dīn sallied forth in a hostile manner against Dāmaghani in the year 778 H and having slain him, severed off the head and sent it to the court.[3] This revolt was (thereby) put down. During the prosperous sovereignty of that good and gracious Emperor, his greatness and beneficence [4] had such an effect over every quarter of his territories,[5] that no where any rebellion reared up its head, nor any body dared to be rebellious in any part, nor could anyone turn his feet from the path of obedience,[6] until this revolt of Dāmaghāni, and he quickly received the punishment for his perfidy.

Frontiers of the Empire placed under great *amīrs*.

The frontiers of the empire were secured by placing them under great *amīrs* and the well-wishers of the Emperor. Thus, towards Hindustan, on the frontier of Bengal, the fiefs of Karah and Mahoba and the district of Dalamau were conferred on Maliku-sh Shark Mardān Daulat, who received the title of Nasiru-l Mulk. The *ikta's* of Oudh and Sandilah,[7] and the district of Kol were placed under

---

[1] The text is not clear. we have seen that Shamsuddin Abu Rijā was entrusted with Sihrind, and that in 773 H., on the death of Zafar Khan, Governor of Guzarat, he was succeeded by his eldest son. We find in C.H.I. III "Firuz was loth to disturb Zafar Khan (" Zafar Khan was already dead in 773 H.), but demanded, of his deputy, Abu Rijā the additional contributions suggested by Damaghani. On Abu Rija's refusal Firoz dismissed him and his master Zafar Khan, and appointed Damaghāni, Governor of Guzarat.

[2] MS reads امدران صرة گعرات : Elliot (IV 13) *New Amirs*. Ranking (I. 334) Amirs of Hundreds of Guzarat. Firishta, ibid (456) "Ameer Judeeda"

[3] "Thereafter Guzarat was put under the control of Farhat-u-l Mulk, otherwise known as Malik Mufarrih Sultānī." Ranking I. 334. Badaoni (Bib. Ind. 251) Firishta, 456.

[4] MS. reads فرط و احسیان (؟ احشان)

[5] MS reads مملکت (؟ ببکر) دبکار.

[6] دائرة اطاعت : دائرة properly circle, orbit.

[7] MS. reads سندید.

Frontier of Bengal placed under Mardān Daulat: Oudh etc., upon Hisamu-l Mulk.

Jaunpur to Bahruz Sultanī. Bihar to Bir Afgān.

Hisamu-l Mulk and Malik Hisamu-ddīn Nawa. The fief of Jaunpur and Zāfrābād was given to Malik Bahruz Sultānī. The fief of Bihar to Malik Bir Afgān. These *amirs* showed no laxity in coercing the insurgents of those parts and confiscating the territories on the frontiers. Thus the Sultan had no anxiety for the control and safety of these parts of his dominion. But towards Khorassan there was no *amir* capable of withstanding the attacks of the Mughals. He (the Sultan) was therefore compelled to summon Maliku-sh Shark Malik Nasiruddīn from the fief of Karah and Mahoba, and to send him to Multan in order to put down the disturbance created by accursed (Mughals) and punish them for their assaults. The *iktās* of this quarter and its dependencies were placed under him, and the fief of Hindustan, such as Karah and Mahoba were bestowed upon Maliku-sh Shark Malik Shamsuddīn Sulaiman, son of Malik Mardan Daulat.[1] After the assassination of Dāmaghani, Guzarat was given over to Malik Mufarrih Sultānī who received the title of Farhatu-l Mulk.

Nasiru-d-din placed in charge of Multan against Mughal inroads

Kara and Mahoba placed under Sulaiman, son of Mardan Daulat

Sultan to Etawah and Akhal.

** In the year 779 H. (1377-78 A.D.) the Sultan rode towards Etawah and Akhal.[2] Rāi Sabir and Adharan the *muquddams* of Etawah, who (formerly) having rebelled against the Sultan had been worsted, were (now) placed in safety,[3] and were taken to Delhi with their wives, children, horse, and attendants. The foundation of fortresses were laid at Akmal and Tablāhī[4] At these places,[5] Malik Zādā Fīroz, son of Malik Taju-d-dīn was left with a large following and... ..[6] amirs Having conferred the *iktās* of Firozpur Tablāhī and Akhal on Tajuddīn and Malik Afgan respectively, the Sultan found his way to Delhi. In this year, also Malik Hisamuddin Nawa,[7] amir of Oudh, who was in attendence on the Sultan passed away, and Oudh was given over to Malik Saifuddin his eldest son.**

---

[1] Badaoni reads "Malik Marwan."

** Portion under asterisk is omitted in Elliot.

[2] Badaoni, "Akchak": The reason of this expedition was a rebellion of the Zemindars of Etawah. Firishta.

[3] MS. reads بترعیب و استظهار در آورده.

[4] Badaoni "Batlāhi:" Firishta, "Tilāi".

[5] Badaoni, "Firozpur and Batlāhī."

[6] MS illegible. [7] Badaoni, "Malik Nizāmuddīn".

Governorship of Oudh devolved upon Saifuddin. The Sultan to Sāmāna, Ambālā, Shahabād and Sahāranpur.

In the year 781 H. (1379 A.D.) the Emperor marched towards Sāmāna: on his reaching the destination, Malik Kabūl Kurān Khwān, *amir* of the Privy council and the Chief of Sāmāna presented offerings and the Sultan showed him great favours. Then, marching through Daulatābād, Ambāla, and Sāhābād, he entered the hills of Saharnpur[1] and levied tribute from the Rāi of Sirmore and the Rāis of the hills, and then took his way back to the capital.

Rebellion of Khargu, the Katehr chief.

Just at this time[2] there came a report of the insurrection of Khargu[3] the Katehr chief. This Khargu had invited Saiyid Muhammad, who held Badāūn, and his brother Saiyid 'Alaud-din, to a feast at his house, and had them basely murdered. In 782 H., the Sultan proceeded against Katehr to take vengeance, and ravaged the country. The rebels of those parts were brought to punishment. Khargu made his escape towards the hills of Kumayun, the country of the Mahtas.[4] The Sultan also attacked them. ** When the expedition came to a conclusion the Emperor placed Badāūn under Malik Qabūl Nawa, and made him the lord of Bed chamber:[5] he (also) appointed Malik *Khitāb* the Afgan at Sambhal for the chastisement (of the rebels) and holding firm Katehr ** The King, under the pretence of hunting, went annually to Kather, and that country became so devastated that nothing but game lived there.

Construction of a fortress at Babuli.

And in the year 784 H. (1382 A.D.) the Sultan built a fortress at Babuli[6] which is seven *Krohs* from Badāūn, and gave it the name of Firozpūr, but the people called it Pur-i-ākhhirīn. Afterwards, the Sultan grew weak and feeble, for his age was ninety years.

---

[1] MS. reads كوة داية سادبور Ranking, 334, "Sirtur hills:" Firishta, "foot of the mts of Saharanpur" Elliot Saharanpur.

[2] Badauni gives 782 H.

[3] MS reads كهركو : Elliot, Khargu. Ranking, "Khūkar" Firishta "Kharku or Khargoo": Badaoni, كهو كهر .

[4] MS reads مهتكانون :

[5] سر بردة دار خاص .

** Portion under asterisk omitted in Elliot

[6] MS. reads, ببولي : Badaoni, "Babuli," "possibly from the abundance there of the *Acacia Arabica* known as Babul—Ranking. Firishta, "Basuli" Elliot, "Beoli:"

The nonagenarian Sultan becomes a puppet in the hands of Khan-i-Jahan.

Khān-i-Jahan,[1] his Vizier, held the reins[2] (of the State) and brought under his sway the affairs of the State. The Firozshāhī amirs and maliks were entirely subservient[3] to him, and those who opposed him (Vizier) were removed from the presence of the Sultan by all possible means; some were killed and others confined.[4] At length, matters came to such a pass, that whatever did Khān-i-Jahan say, the Sultan used to do. For this, the affairs of the state became slow-moving, and some loss occurred daily.

High-handedness of Khan-i-Jahan His dismissal.

Once, Khān-i-Jahān represented to the Sultan how Prince Muhammad Khan having allied himself with some amirs and maliks, such as, Dariyā Khān, son of Zafar Khān, amir of Guzarat, Malik Yakub Muhammad Hāji, the master of the horse, Malik Raju, Malik Samāuddin, and Malik Kamalu-d-din, the son of Malik' Ariz, the personal attendant of the Emperor, was after raising an insurrection. The Sultan had entrusted the affairs of the State upon Khān-i-Jahān, he, without thought and consideration issued the firmān that they should be taken into custody. When the prince heard this he omitted to pay his respects to the Sultan for sometime, and although the Vizier called for his presence the latter made excuses. Then, the Vizier, under the pretence of a balance of accounts kept, Dariyā Khān, son of Zafar Khān, amir of Mahoba, confined in his house. This alarmed the prince still more, (and one day in private came to the Sultan's presence[5]) and he made a statement of his position to his father.[6] The Sultan gave order for the removal of the Vizier and for the release of Dariya Khan. The prince having done this,[7] Malik Ya'kub, master of the horse, (brought out)[8] all the horses and foot, and Malik Kutubuddin Faramuz,[9] keeper of the elephants, (made ready) the elephants with their litters and armour,[10] and took them to the prince. The

---

[1] Jūnān Shah: Briggs says Zafar Khān Farsy:

[2] مطلق الغنان, an error for مطلق العنان.

[3] مسنحرا او گشتنر, an error for مسخرا etc.

[4] دسنکر, an error for دستگایر.

[5] The bracketed portion is taken from Badaoni. Firishta relates that the prince entered into a close palanquin, and was carried to the seraglio of the Emperor.

[6] MS. reads, بش سلطان نىز او را فبول كرده دودند حاصل كردن نتوانستند.

[7] MS. reads, شاهزاده محمد خان ساخته.

[8] The predicate is missing in the text.

[9] MS. فرامر. Elliot "Faramuz".

[10] کستوان, *Kustuwān, Gustuwān*, properly, horse armour.

Firozī slaves and amirs, and the mass of the people also joined the prince.

March of Prince Muhammad against Khan-i-Jahan and the latter's flight.

In the month of Rajab, 789 H. (July-Aug. 1387 A.D.), with full preparations, the prince set out late one night, with a large following, to the house of Khān-i-Jahān. When the latter heard of the approach, he took Dariyā Khān out of prison and put him to death,[1] and collecting a few chosen followers entered into conflict with the prince.

At length, losing the power (of opposition) he fell back to his house, and got a wound while entering it. Unable to make further resistance, he came out (of the house) by another route with a few adherents and escaped towards Mewat, and sought shelter from Kokā Chauhan at Mahari.

The Vizier's followers put to death and his effects plundered

The prince plundered the Vizier's house of all its gold and wealth, and arms, horses, and effects; he then returned to the court. (Next) he caused Malik Bihzād Fath Khān, Malik 'Imadu-daulat, Malik Shamsuddīn .. [2], and Malik Musalih Muksarah who had sided with Khān-i-Jahān to be brought to the court and executed.

Reins of Govt. passes to Muhammad Khān who takes the title of Nasiruddin Muh. Shah

When these transactions were reported to the Emperor, he resigned the reins of government into the hands of the prince, and the amirs and maliks and the slaves of Sultan Firoz and the people in general rallied round the prince. The Sultan grew old and feeble, so of necessity he, at length, made over to the prince the paraphernalia of sovereignty, with all the horses, elephants, effects, and equipage. He gave him the title of Nāsirud-dīn Muhammād Shah, and betook himself to the service of God. In every Jami'a mosque throughout the dominions, the *Khutbah* was read in the names of the two sovereigns, and in the month of Sha'aban, 789 H. (Aug. 1387 A.D.) Muhammad Shah ascended the throne in the palace of *Jahān numāh*.

Conferment of titles, etc., on Amirs.

The titles and offices, the fiefs and allowances, pensions and gifts, and whatever had been enjoyed by any one during the previous reign were confirmed. Malik Yakub, master of the horse was made Sikandar Khān[3] and was nominated to the charge of the government of Guzarat ** Malik Rāju

---

[1] Firishta, "having first put to death Zafar Khan".

[2] MS. reads, ملک شمس الدین بزبان.

[3] MS. reads, اسکندر خان : Badaoni and Elliot, "Sikandar"

** Portion under asterisk omitted in Elliot

became Mubāriz Khān; Kamāl 'Amr (?)[1] became Dastur Khān; Malik Samā' became Aminu-l-Mulk; Malik Samā'uddīn and Kamāluddīn obtained places near the person of the King and became the recipient of his favour: the duties of the Diwan were conferred on them. * * Malik Ya'kub Sikandar Khān was sent with an army to Mahāri against Khān-i-Jahan. When this force reached Mahāri, the accursed Kokā bound Khān-i-Jahān, and delivered him up to Sikandar Khān, who put him to death, and having sent his head to the court, went his way to Guzarat. The prince then engaged himself to the duties of government.

Khān-i-Jahān was seized and put to death

In the month of Zilhijjah,[2] of the year,[3] Muhammad Shah marched towards the Sirmūr hills, and there spent two months, hunting rhinoceros and elk. While thus engaged, advices were received relating to the perfidious assassination of Sikandar Khān at the hands of Malik Mufarrih, Amīr of Kambayat and the Amirs-sadah of Guzarat. The army that had set out with the deceased, some of them wounded and some despoiled, returned to Delhi with Saiyid Salār[4] On this information, Prince Muhammad Khān became thoughtful and anxious, and hastened to the capital But as he was inexperienced, the Prince gave himself up to enjoyment and luxury, and took no thought for avenging Sikandar Khan[5]. For five months the (old) rules and arrangements kept the affairs of the state agoing, but at length the kingdom fell into great disorder The Firoz Shāhī slaves who had taken up their habitations in Delhi and Firozābād, stirred up by the opposition shown by Malik Samāu-d-din and Malik Kamāluddin[6], set themselves up in opposition to the Prince and joined themselves to Firoz

Muhammad Shah on hunting expedition at Sirmūr hills

Assassination of Sikandar Khān

Incompetence of Muhammad and the Kingdom in disorder

---

[1] كمال عمر.

[2] Elliot, Zilkaāda.

[3] Firishta and Badaoni give 790 H.

[4] Badaoni writes "Sipah-Salar".

[5] Text reads, و كشتة شدن سكندر خان سهل بنداشت.

Badaoni (ibid. 254) writes, فكر انتقام سكندر خان نكردة.

[6] Firishta (460) writes Bahauddin and Kāmaluddīn, cousins of Prince Muhammad. Thus, he says, the nobles seeing the affairs in them united themselves with Princes Bahauddin, etc, for the purpose of subverting his authority. Badaoni's version is different. He writes thus "the Sultan's" (Muh. Shah) soldiery by reason of their enmity and jealousy against Samauddin and Kamaluddin, who were the *proteges* of Muhammad Shah, set themselves in opposition to them, etc."

Shah. When the Prince came to know of these facts, he sent out Malik Zahiruddin Lāhori to parley with the slaves, who had assembled in the *Maidān* They, however, pelted him with stones, and thereby wounding Zahiruddin made a display of their force and rejected all overtures for peace The Malik, thus wounded, was obliged to retire near the prince, who was prepared for action. The Prince advanced with his horse, foot and elephants to the *Maidān* against the rebels; and when he fell upon them, they fled to the palace and sought refuge with the old Sultan. For a couple of days fighting went on, but on the third day when the prince was prepared to renew the contest, the insurgents brought out the old Sultan from the palace. When the soldiers and elephant-drivers set eyes upon their former master they deserted the prince and came over to the Sultan[1] Finding that he was unable to continue the struggle further the prince with a small following fled towards the Sirmur hills The camp of the Prince and those of his followers were put to plunder. The city now presented a scene of great violence.

Muhammad march against insurgents, his success

Flight of Muhammad Shah to Sirmur.

Tranquillity being restored, the old Sultan appointed Prince Tughlaq Shah, the son of his (elder) son Fath Khan, his heir-apparent, and consigned to him the affairs of government. In the meantime, Amir Husain Ahmad Ikbal,[2] son-in law of the Sultan who had separated from the party of the prince, was made prisoner by the Hindu amirs, and taken to Tughlaq Shah who had him executed before the *dākhūl*; orders were issued to Amirs Sadah of Samanā, directing them to seize Ghalib Khan[3] the amir, and bring him to the court When he was brought in the prince sent him away a prisoner to Bihār and conferred Samāna upon Malik Sultan Shah. On the 18th Ramazan[4] 790 H., (Nov. 1388 A D) Sultan Firoz may his tomb be sanctified, died, worn out with weakness. It has been recorded by veracious historians and truthful chroniclers of venerable age that since the time of Nasiruddin, son of late Sultan Shamsu-d-din Altamash, who was a second Naushirwan[5] there has been no king (in Delhi) so just, and kind, so

Prince Tughlaq Shah appointed heir

Death of Sultan Firoz, His appreciation

---

[1] Text runs—چون لشکر و پیل بانان همه پرورده سلطان بودند بیکبا رگی از جانب شاهزاده روی تافته بر سلطان مرحوم پیوستند .

[2] Badaoni, Mir Hasan: Firishta, 'Amir Saiyid Hussain.'

[3] Elliot, 'Ali Khān: Badaoni, Ghalib Khān

[4] Badaoni, 16th Ramazān, 790 H. Firishta, 3rd Ramazān.

[5] The name of a King of Persia, called also Khosrou Naushirwān, in whose reign Māhomet was born in 578 A.D

courteous and God-fearing, or such a builder, like the late Firoz Shah, may his tomb be blessed and may he dwell in paradise! His bravery and justice won for him the hearts of his subjects. If any indigent traveller by the decree of God, died on the way, the feudal chiefs, the holders of offices, and the *muqwddams* of the vicinity, having called together the Imāms, the Kāzis, and all Musalmans, examined the corpse, and drew up a report under the Kazi's seal, certifying that no trace of any wound was discernible on the body, and after that they buried it. Thus, by enquiries of the Kazis, all the injunctions of the Sherra (law) were carried to the letter, and on all sides it was in no way possible that during the reign of this sovereign, any strong man could tyrannise over the weak.**

COUPLET

After many a revolution of the trying sphere
Died he but his justice remained!

Almighty God immersed this gentle, beneficient and just king in the divine compassion, and gave him a place in the propinquity of His mercy! The rule of the late Sultan Firoz Shah may his tomb be sanctified, lasted for 38 years,[1] and nine months. The two words, "*Wafat-i-Firoz*" comprise the numerical letters of the date of his demise.[2]

---

** The text in Elliot here terminates.

[1] Elliot 37 years and 9 months. Budaoni, "38 years and some months." Firishta of latter opinion.

[2] Text. تاريخ وفات سلطان بهمني دو لفظ افتده ( وفات ) فيروز سنه ٧٩٠.

# End of Prasenajit, King of Kosala

By NILMANI CHAKRAVARTI

Bimbisāra, King of Magadh and Prasenajit, King of Kosala, were contemporaries of Buddha and both were his great admirers. Bimbisāra was put to death by starvation, by his son Ajātaśatru. In several places in the Pāli literature there are references to this patricidal crime. The earliest mention of it is to be found in the Sāmaññaphalasuttanta of the Dighanikāya, where Ajataśatru, during a visit to Buddha, confessed his crime before the teacher. The Ceylonese chronicle Mahāvaṃśa also records the fact and describes the whole race as patricidal This is going too far. The later Pāli commentaries record the details of the crime (see Sumaṅgalavilāsinī on the Sāmaññaphalasuttanta). Historians of modern times have accepted the fact as true although the Jaina records attempt to mitigate the crime (see Bhadravāhu's Kalpasūtra) and the Brahminic records are silent about it

The ancient records are all silent about the end of the other king. Professor Rhys Davids in his "Buddhist India" (page 4) wrote: "Three years afterwards, Pasenadi's son Viḍuḍabha revolted against his father, who was then at *Ulumba* in the Śākya country. The latter fled to Rājagaha to ask Ajātasatru for aid; but was taken ill and died outside the city-gate." In a foot note on the same page the following references have been given:—Saṃyuttanikāya, vol. I, 83; Jātaka 2,403; 4,343 and Avadāna śataka 51. But in none of these sources there is any reference to Viḍuḍabha's rebellion and usurpation of the throne. In the commentary on the Dhammapada, verse 3, ch. IV, as well as in the *Paccuppannavatthu* of the Bhaddasālajātaka (Faüsfoll 465) we get a detailed account of the end of Prasenajit. It must be said here that the commentaries, though they are of late origin, are all based on the Siṃhalese commentary, which is ascribed to Mahinda, the apostle of Ceylone, and some reliance can be placed on them. The story is briefly given below:—

Prasenajit, king of Kośala, appointed as his commander-in-chief Bandhula, a Malla of Kusinārā, who was his fellow-student at Taxila The latter was a just man and soon became very popular and powerful. He had a number of war-like sons. Once some officers of the court of justice taking bribe wrongly decided a suit. At this the aggrieved party appealed to Bandhula who rightly judged the matter and the people praised him loudly. The King hearing the fact was highly pleased and

appointed Bandhula as the administrator of justice. The court officials were in great difficulty and began to conspire to bring about his ruin. They told the king that Bandhula was desirous of usurping the throne. The king believing their words contrived a plan for putting to death Bandhula and his sons. Being afraid of doing anything in the city for popular displeasure, he employed some men and raised a rebellion in the frontier of his Kingdom and sent Bandhula with his sons to put down that The king also sent men with instructions to put Bandhula and his sons to death. On the arrival of the commander the pretended rebels fled and when he was returning to the city he was murdered along with his sons. Afterwards Prasenajit came to know of Bandhula's innocence and was highly remorseful He appointed Dīghakarāyana, Bandhula's nephew, his commander-in-chief

It may be said here in passing that in the Arthaśāstra of Kautilya (Bk. V, ch. V) we come across a teacher named Dīrgha-cārāyaṇa. Phonetically Pāli Dīghakārāyana and Sanskrit Dirghacārāyana are one and the same and both were politicians. In the Kāmasūtra of Vātsāyana we come across a teacher named Cārāyana who wrote a treatise on the Kāmaśāstra (Kāmasūtra I, 1. 12). His opinion also has been quoted as an authority in the Kāmasūtra I, 4.20 and I, 5.22. From I,5.22 it appears that he was a political intriguer From the above facts it appears quite probable that three persons were one and the same and flourished towards the end of the 6th or the beginning of the 5th century B.C

Dīgha-Kārāyaṇa was a shrewd man. He at once began to devise plan for wreaking Vengeance on Prasenajit for the murder of his uncle and his sons. Once Buddha was sojourning in a small town of the Śākyas, named Ulumpa. King Prasenajit went there and encamped near the residence of Buddha and went to pay a visit to him While entering the monastery, the King in order to show humility handed over his crown, sword and other insignia of royalty to Dīgha-Kārāyana and alone entered into the chamber of Buddha. Kārāyaṇa, who evidently by that time had the whole army within his control, taking advantage of that crowned Virulhaka as king and went to Sravasti, leaving a horse and an attendant woman for the deposed king. When Prasenajit came out he found none and learning everything from the woman proceeded to Rājagṛha to ask for help from Ajātaśatru his nephew and son-in-law. He arrived there late in the evening, found the city-gate closed, was taken ill and died in the night, in a hut outside the gate.

It is to be noted here that in the Samyuttanikāya (II,89, p 118, P.T.S. edition) we find that King Pasenadi (Prasenajit) paid a visit to Buddha accompanied by Dīgha kārāyaṇa, at a small town of the Sākyas, named Medaḷumpa. As in the story given above the King made over the insignia of royalty to

Kārāyaṇa and entered alone into Buddha's chamber But the latter part of the story, *i.e.*, the overthrow of the king by Kārayaṇa is not to be found in it. In the Avadāna śataka (vol. II, p. 114) Dīrgha Cārāyaṇa has been mentioned as charioteer of Prasenajit.

Regarding the remarks of Prof. Rhys Davids quoted above, it may be said, that it is quite probable that Viruḷhaka did not entertain good feelings towards his father because he sent away Viruḷhaka and his mother, when he came to know that the lady was an illegitimate daughter of her father and only accepted them to his favour, through the intervention of Buddha (see the comm referred to above). Further the usurpation of Ajātasatru might have instigated him to rebel against his father, but the records do not show this

## Ghoṭakamukha a predecessor of Kauṭilya and Vātsāyana

By NILMANI CHAKRAVARTTI

Both Kauṭilya and Vātsāyana mention as their predecessor Ghoṭakamukha and Cārāyaṇa or Dirghacārāyaṇa. In my paper on "The end of Prasenajit, king of kośala" I have pointed out that Cārāyaṇa was a contemporary and an officer of Prasenajit and the latter was overthrown by the former. In the present paper I propose to say something about Ghoṭakamukha. Ghoṭakamukha has been only once quoted in the Kauṭilya Arthashastra (Bk. V, Ch. V). But from that quotation nothing can be ascertained except that he was a predecessor of Kauṭilya and that he probably wrote a treatise on politics. He has been, however, largely referred to in the Kāmasūtra of Vatsāyana. In the introductory portion of the work (Ch.-I, 14) it has been said that Ghoṭakamukha wrote a treatise on *Kanyāsamprayuktakam* or 'union with a girl'.

He has been quoted six times in the body of the book :—

1. गणिकायाः दुहिता वा परिचारिका वाऽनन्यपूर्व्वा सप्तमीति घोटकमुखः । कामसूत्र 1. 5. 24.

'A daughter of a harlot or an attendant woman who has not associated with any one previously, as the seventh', thus says Ghoṭakamukha :—

2. यां गृहीत्वा कृतिनमात्मानं मन्येत न च समानैर्निन्द्येत तस्यां प्रवृत्तिरिति घोटकमुखः । (*Ibid.*, III. 1. 3).

'Taking whom one would consider oneself as having accomplished his purpose, and would not be blamed by his equals :—
One should associate with such an one (girl)', thus says Ghoṭakamukha.

3. न यदृच्छया केवलमानुषयेति घोटकमुखः । (*Ibid.*, III. 1. 4).

'And not at will with any woman'—so says Ghoṭakamukha.

4. सर्व्वा एव हि कन्याः पुरुषेण प्रयुज्यमानं वचनं विषहन्ते न तु लघुमिश्रामपि वाचं वदन्तीति घोटकमुखः । (*Ibid.*, III. 2. 7).

All girls endure words uttered by a man but do not utter even the smallest word in the middle—so says Ghoṭakamukha

5. अन्यामपि बाह्यां स्पृहयेद् बालाया(?)मेवं सति धर्माधिगमे संवननं श्लाघ्यमिति घोटकमुखः। III. 3. 4.

'One may covet any other girl who is an outsider (outside a circle of relation) and thus on the attainment of Dharma (Virtue) love is praiseworthy'—so says Ghotakamukha.

6. दूरगतभावोऽपि हि कन्यासु न निर्वेदेन सिध्यतीति घोटकमुखः। III. 4. 29.

'One who has gone far in his affection does not succeed with girls through indifference'—so says Ghotakamukha

From the above quotations we can have some idea about the views of Ghoṭakamukha. He has given preference to a girl or to a woman who is not claimed by any one for the purpose of love-making He has also considered marriage to be *Dharma*

In the Majjhimanikāya of the Pāli *Suttapitaka* there is a sutta named Ghotamukha-sutta (M. N Vol II, p. 157), which contains a conversation between a Brāhmana named Ghotamukha and a Buddhist monk named Udena Ghotamukha who was probably an inhabitant of the Anga country and used to receive daily five hundred *kahāpanas* from the king of Aṅga came to Benares on some business and there met Udena In the course of a conversation between the two, Udena said that there were four classes of men, *viz.* (1) those who subject their ownselves to sufferings, (2) those who cause sufferings to others, (3) those who subject themselves to sufferings and cause trouble to others and (4) those who do not cause sufferings to themselves nor to others. And Udena asked Ghoṭamukha which of these classes of men would please him Ghotamukha said that he would like those men who would not subject themselves to sufferings nor would cause sufferings to others

A careful comparison of the view of Ghoṭamukha of the Ghoṭamukhasutta with the views of Ghotakamukha quoted in the Kāmaśāstra of Vātsāyana would show that there is similarity between the two. The Sūtra III 1. 3. quoted above as well as the general tone of the Sūtras 1, 3 and 5 represent the views of one *who would not bring about sufferings on himself nor cause trouble to others.* I have no hesitation in

identifying Ghoṭakamukha, quoted by Vātsāyana as well as Kauṭilya with Ghoṭamukha of the Ghoṭamukha suttanta.

The above identification also helps us in ascertaining the time of Ghoṭakamukha or Ghoṭamukha. It has been said in the sutta that being pleased with the conversation with Udena Ghoṭamukha wanted to take refuge (*śaraṇa*) with Udena but the latter told him to take refuge with Buddha with whom he himself took refuge. When Ghoṭamukha enquired as to where Buddha was at that time Udena told him that he (Buddha) attained Parinibbāṇa. Then Ghoṭamukha made his declaration of faith in Buddha, Dhamma and Saṅgha and wanted to offer something to Udena out of the five hundred *kahāpaṇas* which he daily received from the king of Aṅga. Udena would not accept any gold or silver and requested Ghoṭamukha to construct a hall (*upaṭṭhānasālā*) for the *Bhikkhus* at Pāṭaliputra. The hall was constructed and named after the donor.

From the above facts it is clear that Ghoṭamukha lived after the death of Buddha and at a time when Pāṭaliputra grew in importance. During the last journey of Buddha from Rājagṛha to Kusinārā, Ajātaśatru, king of Magadha was building a fortress at the site of Pāṭaliputra to ward off an invasion of the Vajjis who occupied the territory to the north of the Ganges. Sometime after during the rule of a successor of Ajātasatru the capital was transferred from Rājagṛha to Pāṭaliputra about the 4th century B.C. This gives us one limit for the date of Ghoṭamukha. Regarding the other limit, it may be said that on the railings of the Bharhut Stūpa amongst the titles of donors we find the expression *Pañcanekayika* which shows that the five *nikāyas* of the Pāli canon were well-known at that time. Portions of the railings of the Bharhut Stūpa may be referred to the middle of the 3rd century B.C. and so Ghoṭakamukha or Ghoṭamukha must have flourished between the 4th and the 3rd century B.C.

## The Beginnings of Suketri Dynasty

BY S. R. SHARMA

Cunningham placed the beginning of the present reigning house of Suket in the latter part of the eighth century [1]. Messrs. Vogel and Hutchinson followed him closely and assigned 765 A D. as the date of the establishment of the present house under Vir Sen. But the tradition has it that these Sens migrated to the Punjab hills in the beginning of the thirteenth century. Of course the tradition may be wrong, but it is very seldom that it postdates any events. Raja Jai Chand with whom the present dynasty seeks to connect itself did not after all play any very heroic part in the history of India that a Rajput family should be anxious to connect itself with his descendants. Still less could much credit accrue to the house by being connected with these thrice expelled descendants of the unfortunate Raja. Unless, therefore, some very compelling reasons can be advanced against the tradition, we should rather be inclined to accept it.

Let us therefore study Cunningham's thesis as elaborated by his followers. To begin with, from Vir Sen to Arjun Sen there were thirty-five reigns. Arjun Sen's date has been, pretty conclusively, fixed at about 1550 A D. Now this would give about 350 years to 35 reigns giving an average of ten years. It is claimed that as the average for the latter half of the dynasty's history (from Arjun Sen 1550 A D. to Uggar Sen 1876 A.D.) works out at 30 years a reign, we should allow a longer period for the earlier half as well. The argument is rather inconclusive in view of the fact that the average of 31 years gets reduced to 24 years if we include the four Rajas bringing the list up to the death of Raja Bhim Sen in 1919 A.D.

But Cunningham relied upon even more broken reeds His one strong point at the time seemed to be the Nermad inscription which he dated in the year 1170 A D. He identified Samudar Sen of this inscription with Raja Samudar Sen of Mandi and could thus point out one fixed date in the early history of the dynasty. But unfortunately Fleet's rendering of the inscription [2] has shattered it all. Cunningham read into the Varuna Sena, Sanjya Sen, and Ravi Sen of the inscription three Rajas of the Suketr Bansawali whose names stand poles apart from those mentioned in the inscription. Fleet flatly refused to accept this equation and on other grounds has placed

[1] Archæological Survey Report, Vol. XIV, p. 123.
[2] Corp. Inscripc. Indi., Vol. III, p. 286 to 291.

the record in the seventh century A.D. As the names of the three Rajas mentioned in the inscription have nothing in common with those mentioned in the Bansavali, it would be too great a strain on our credulity to ask us to believe—even on Cunningham's authority—that Samudar Sen of the inscription has anything to do with Raja Samudar Sen of Suket. Thus here again Cunningham's argument totally fails.

Some supplementary evidence has been trumpeted up to bolster up Cunningham's thesis. Certain references to Suket in the early histories of the neighbouring hill states have been fished up to prove that the history of Suket carries us to very early times. Such are the references in the Chamba annals to Mushan Varman's taking refuge with a Raja of Suket about 800 A.D.[1], in the Bilaspur chronicles to Raja Bir Chand's conquest of Keonthal about 743 A D , in the history of Kullo to its conquest in the reign of Bhupal and his successors by Rajas of Suket, in the annals of Sirmur to Raja Mahi Parkash's demanding the daughter of Raja Rupchand of Keonthal in marriage about 1108–1117 A.D[2] We fail to find in these references anything to prove that the present Sen dynasty of Suket goes back to the times spoken of in the chronicles of these neighbouring States Of course they prove that there were, in existence, at these early times the States of Suket and Keonthal. The traditional history of the present Suketor dynasty does not claim that Vir Sen or Giri Sen founded new states when they fled from Rupar, they became, it is asserted, masters of the states of Suket and Keonthal It is probable that these states had become political entities much before their arrival on the scene The evidence from the Sirmur chronicles throws a flood of welcome light on the question The name of the Raja of Keonthal whose daughter's hand was demanded in marriage by Raja Mahi Parkash is set down as Rupchand Now Giri Sen's descendants always carried the suffix Sen with their name and it is clear that reference is made here to some earlier reigning house of Keonthal

Thus we find that all that can be urged against the acceptance of the traditional account falls to the ground The Nirmad inscription, references in the annals of other neighbouring state all prove useless in our search for some light on the question. There simply remains the problem of squeezing in fifty reigns of the Suketar Rajas in some 713 years. An average reign of fourteen years over a period of seven long centuries is inherently not improbable. Furthermore the number is reduced to forty Rajas for the same period if we consider the Rajas of Mandi This would give about eighteen years as the average reign of the Mandi Rajas There is no reason why we should be anxious to stretch a point and insist that the tradi-

[1] Chamba Gazetteer, p. 72. [2] Sirmur Gazetteer, p. 9 and 10.

tional account is wrong; because, forsooth, the average of fourteen to eighteen years does not seem convincing to us. It does not carry us very far to say that if we accept the traditional date, the average reign of the early Rajas would be rather low when compared with the later ones. The early Rajas of Suket must have been small chieftains whose lives were spent in warfare with their own subjects if not with their neighbours. From Bir Sen to Bahu Sen the nine reigns, we know from the Mandi Bansavali, did not occupy more than 116 years, thus giving an average of less than thirteen years The average is again confirmed if we work on the Mandi Bansavali to Jai Sen's times when we find 17 reigns occupying 185 years No reason has so far been advanced to prove that these early rulers could not have ruled for such short periods. Our only guide therefore must be the tradition and in this case when it has nothing to gain by postdating the event, we are constrained to admit that it must be right. The beginning of the Suketar dynasty therefore must be put in the thirteenth century A.D

## On the Hindu names for the rectilinear geometrical figures

By BIBHUTIBHUSAN DATTA

In the Hindu mathematical treatises of later times, we discern two different systems of nomenclature for the rectilinear geometrical figures. In one system the naming is according to the number of "sides" of the figures, e.g. *tri-bhuja* (literally meaning "tri-lateral"), *catur-bhuja* ("quadri-lateral"), *pañca-bhuja* ("penta-lateral") *ṣaḍa-bhuja* ("hexa-lateral"), etc. In the other, the naming is based on the number of "angles" or "corners" in the figures, e.g. *tri-koṇa* (meaning literally "triangle"), *catus-koṇa* ("quadrangle"), *pañca-koṇa* ("penta-gon"), *ṣaṭ-koṇa* ("hexa-gon"), etc We also commonly meet with such names as *tryasra* for the triangle, *caturaśra* or *caturasra* for the quadrilateral, *pañcāsra* for the pentagon, *ṣaḍaśra* for the hexagon, and so on. The true radical meaning of these names will be found later on. The present note aims primarily at examining the earlier Hindu names for the rectilinear geometrical figures and to determine, as far as possible, the oldest Hindu system of nomenclature. It is found that from the earliest times, the Hindus have followed the usage of naming the rectilinear figures according to the number of sides as well as of angles, and that the angle-nomenclature is the older with them Amongst the Greeks, Euclid (*c.* 325 B.C.) in the earlier parts of his *Elements* divides the rectilinear figures according to the number of their sides (cf. *tri-pleuron*, *tetra-pleuron*, *poly-pleuron*), but later on he introduces the angle-nomenclature also (cf. *tri-gonon*, *tetra-gonon*). The Romans simply followed the Greek usage.[1] The early Egyptians together with the Babylonians, Hebrews, and Arabs are said to have followed only the side-nomenclature.[2]

The oldest Hindu names for the rectilinear geometrical figures were formed by the juxtaposition of the number names with *srakti*. The word *srakti* means the "angle" or "corner",[3]

---

[1] J. Tropfke, *Geschichte der Elementar-Mathematik*, 1923, Bd. IV, pp. 60–61.

[2] This information has been given to the writer in a personal letter by Dr. Solomon Gandz of New York and in fact, this note has grown out of a reply to an enquiry by him for the older and genuine Hindu usage in naming the rectilinear geometrical figures.

[3] This meaning is given in all the known Sanskrit dictionaries. Professor E. W. Hopkins conjectures that *srakti* means the "spear" (vide *Journ. Amer. Orient. Soc.*, vol. 15, 1893, p. 264 fn). The word

so the name *catuhsrakti* literally means the "quadrangle." This name occurs in the *Vājasaneyī Samhitā*,[1] *Taittirīya Samhitā*,[2] *Śatapatha Brāhmana*,[3] *Āpastamba Śrauta-sūtra*,[4] *Baudhāyana Śulba-sūtra*,[5] and other works, the earliest of which was composed before 3000 B.C Similarly we have in the *Rgveda*,[6] the term *navasrakti* referring to the "nine corners" of the heaven These names have long went out of use and are not met with in later works

Another kind of names consists of compounds ending with *aśri*, *aśra* or *asra* There is a rule of the celebrated grammarian Pānini (c. 700 B.C.) that at the end of a compound, *aśri* changes to *aśra* or *asra*.[7] But it seems that that rule has not been always followed in practice For compound names ending with *aśri*, such as *triraśri*, *caturaśri*, and *śatāśri* occurs as early as in the *Rgveda* (before 3000 B C.)[8] The name *astāśri* occurs in several early Sanskrit works.[9] Similar names are occasionally met with even in later Hindu mathematical and other treatises.[10] The names containing *aśra* or *asra* such as *tryasra*, *caturasra* or *caturaśra*, etc. are more common in the Sanskrit and kindred literatures of India, modern as well as old. But they were not however introduced before the time of the *Śrauta-sūtras* (c. 1500–2000 B C.)[11]

Competent authorities have differed as regards the literal significance of the compound names ending with *aśri*, *aśra* or *asra* According to Amarasimha (c 350 A D.).[12] Bhattotpala (966)[13] and Halāyudha (c. 1200)[14] *aśri* means the "angle"

---

*rakti* has been employed in the *Rgveda* (vii. 18 17), *Atharvaveda* (ii. 11. 2, viii. 5 4, 7, 8), *Satapatha Brāhmana* (ii. 6. 1. 36; iii 5. 2. 8); *Chāndogya Upanisad* (iii. 5. 1), *Āpastamba Srauta-sūtra* (viii. 16. 6, 8 x 5 2, 3; xvii. 12—16) and *Baudhāyana Sulba-sūtra* (i. 72, 84, 101; ii. 23, 72; iii 73, 77).

[1] xxxviii 20. [2] vi 6 10. 1.

[3] ii. 6 1. 10, vi. 1 2 29; 3 3 26; 7 1 15, vii. 5 1. 23 [4] vii. 5 1

[5] i. 79, 83. [6] viii 76. 12. [7] Panini's Grammar, v. 4. 120.

[8] i. 152. 2 (*triraśri*), i. 152 2 and iv 22. 2 (*caturaśri*); vi. 17. 10 (*śatāśri*).

[9] Vide *Aitareya Brāhmana* (ii. 1); *Satapatha Brāhmana* (iii 6. 4 27, 7. 1. 28; v. 2 1. 5), *Āpastamba Srauta-sūtra* (vii 3 2; xvi. 4 10). The term *navāśri* occurs in this latter work (xvi 4 11)

[10] For instance we find in the *Brhat Samhitā* the use of *sadaśri* (Lv. 20; Lxxix 8), *astāśri* (Lu. 28), *sodaśāśri* (Lu. 28); in the *Āryabhatīya* the use of *sadaśri* (ii 6) and *dvādaśāśri* (ii 3) and in the *Siddhānta-śekhara* the use of *dvādaśāśri* (xiii). Bhattotpala has quoted passages from earlier writers containing use of the term *sadaśri* (vide his commentary on the *Brhat Samhitā*, ed Sudhakara Dvivedi, Benares, pp. 654, 655, 671, 760, 761)

[11] For instance the name *tryasra* occurs in the *Āpastamba Śrauta-sūtra*, xx. 12; *caturaśra* in *Āpastamba Śrauta-sūtra*, xvi 4. 7, *Kātyāyana Śrauta-sūtra*, viii. 5. 28; xvi. 2. 2, 4. 7. 5. 5; xvii. 5. 3; *Kauśika sūtra of Atharvaveda*, Lxxxv. 137.

[12] Vide *Amarakosa* on "Kona."

[13] See his commentary on *Brhat Samhita*, pp. 680, 760, 761, 764.

[14] *Abhidānaratnamāla*, ed Aufrecht, iv 4. 2.

according to Hemacandra (*b* 1088),[1] it means the "angle of a room etc.", whereas in the opinion of Sāyana (*c*. 1325) [2] it means the "edge". Amongst the modern Indologists, Grassmann [3] renders *aśri* by "sharp edge" (scharfe kanten), Aufrecht [4] by "corner", Macdonell [5] by "edge". According to Monier Williams,[6] *aśri* means "the sharp side of anything", "corner", "angle (of a room or house)" or "edge (of a sword)". Rhys Davids [7] observes that Sanskrit word *aśri* or *aśra* is equivalent to Pāli *assa* meaning "corner, point"; Greek ἄχροζ, ἄχριζ and οξυζ, sharp, Latin *acer*, sharp. It is found on closer observation, that the names ending with *aśri* have never been employed in connection with plane rectilinear figures, but they always refer to solid bodies such as sacrificial post (*yupa*), pillar, or an instrument (spear). On the other hand the use of the names ending with *aśra* or *asra* has always remained restricted to plane rectilinear figures. *Aśri* truly signifies the "edge": with reference to "angle", it means the "dihedral angle", but not the solid angle at the point of intersection of more than two edges. For Āryabhata (499 A.D) calls the triangular pyramid by the name (*ghana*) *ṣaḍaśri* and the cube by *dvādaśāśri* [8] This latter name has been restated by Śrīpati (1039 A.D) [9] In these instances *aśri* certainly refers to the "edge" The true significance is clearly in evidence in a certain passage in the *Arathaśastra* of Kauṭilya (*c* 350 B.C.). In describing the mauspicious crystals of valuable stones, Kauṭilya has employed the two appellations *naṣṭakona* and *niraśri* to the same instance.[10] So the word *aśri* implies something different from "kona" ("pointed corner" or the "solid angle" of the prism) and indeed, it means the "edge" of the prism.[11] Similarly in a certain passage of the *Āpastamba Śrauta-sūtra* [12], *aśri* undoubtedly refers to the edge. The description of a cube, found in ancient Jaina canonical works [13] leaves, however, absolutely no doubt about the true significance of the word *aśri*. There the cube has been correctly described as *ṣaṭtala* ("six-faced"), *dvādaśāśrika* ("twelve-

---

1 *Abhidhānacintamani*, "gṛhāde koṇa."

2 Vide Sāyana's commentary on the *Ṛgveda* (iv. 22. 2; vi. 17. 10)

3 H. Grassmann, *Wörterbuch zum Rigveda*, Leipzig, 1873, p 139.

4 Vide his edition of *Abhidhānaratnamāla* of Halāyudha.

5 *Practical Sanskrit Dictionary*.

6 *Sanskrit-English Dictionary*, new edition by Leumann and Cappeller.

7 Rhys Davids and Steele, *Pali-English Dictionary* on "assa". According to Rhys Davids it also means the "edge"; compare "aṃsi".

8 *Āryabhaṭiya*, ii. 3, 6.

9 *Siddhānta śekhara*, xiii.

10 *Arthaśāstra*, ed. by Shāmaśāstrī with English translation, ii. 11, 29, p. 77.

11 Shāmaśāstrī wrongly translates *niraśri* as "uneven".

12 xvi. 4, 7–11.

13 *Anuyogadvārasūtra*, Sūtra 133; *Jambudvipa prajñapti*, Sūtra 54.

edged") and *astakarnika* ("eight-cornered"). However, since the names containing the word *aśri* are not used in connection with the rectilinear figures, any further discussion of them will be beyond the scope of this paper.

In Sanskrit lexicons, the meaning of the word *aśra* or *asra* is stated to be "corner" or "angle." But it is found that the compound names ending with *aśra* or *asra* do not always possess a reference to the "angles" of the figure For instance, *caturaśra* or *caturasra* does not always mean literally the "quadrangle." In the *Sūryaprajñapti* (c 500 B C).[1] are found the names of four different figures *viz*, *sama-caturasra*, *visama-caturasra*, *sama-catuskona* and *visama-catuskona*. In these cases *caturasra* certainly means the "quadrilateral," as *catuskona* means the "quadrangle". Again in stating the tradition about the Uttaravedi, Baudhāyana says[2]: "It has the measure of a sāmyā and is four-cornered (*catuhsrakti*)" He then adds[3]: "It is a square (*sama-caturasra*) as no particular rule is given." In these passages a distinction appears to have been implied between *catuhsrakti* and *samacaturasra* This distinction has been clearly brought out in a passage in the *Atharvaveda-Pariśista* which states, in connection with the construction of a certain sacrificial altar, that it "should be measured with the rope equally four-sided (*caturaśram*) and four-angled (*catuskonam*)".[4]

Amongst the later commentators, in the opinion of Ganeśa (1545), *tryasra* literally means the "triangle," *caturasra* the "quadrangle," *pañcāśra* the "pentagon." and so on;[5] whereas according to Mallinatha[6] and Abhayadevasūri (c 1050),[7] *caturasra* literally means the "quadrilateral" Thibaut

---

[1] Sūtras 19, 25 According to Weber (*Indische Studien*, vol. 10, p 274) *samacaturasra*=even square ("grades quadrat"), *visama-caturasra*=oblique square ("schiefes quadrat"), *sama-catuskona*=even parallelogram and *visama-catuskona*=oblique parallelogram.

[2] *Baudhāyana Sulba-sūtra*, i. 79 The translation is by Thibaut, "the Sulva-sūtras" (*Journ Asiat Soc Beng.*, 1875). hereafter the reprints of these articles will be referred as Thibaut, *Sulva-sūtras*

[3] *Baudhāyana Sulba-sūtra*, i 80

[4] *The Pariśistas of the Atharvaveda*, ed G. M Bolling and J. V Negelein, vol. 1, Leipzig, 1909, xxx 1. 5: "Caturaśram catuskonam tulyam sūtrena dhārayet".

[5] Commentary on Bhāskara's *Līlāvatī*, section on plane figures. Cf. H. T Colebrooke, *Algebra with arithmetic and mensuration from the Sanskrit of Brahmegupta and Bhāscara*, London, 1817, p. 58 fn. Hereafter this book will be referred as Colebrooke, *Hindu Algebra*

[6] Commentary on Kālidāsa's *Kumārasambhava*, i. 32. This passage has been quoted in extenso by Weber in support of his rendering *caturasra* by "quadrilateral." (*Ind. Studs*, vol. 10, p. 274 fn)

[7] Abhayadeva-sūri observes: "तत्र समः— शरीरलक्षणोक्तप्रमाणाविसंवादिन्यश्चतस्रोऽश्रयो यस्य तत् समचतुरस्रं, अथवा चतुर्दिग्विभागोपलक्षिताः शरीरावयवास्तत्र सर्वेऽप्यश्रयाः शरीरलक्षणोक्तप्रमाणाव्यभिचारिणो यस्य न तु

is responsible for the opinion that in *sama-caturasra*, which is the term commonly employed in the *Śulba-sūtras* to denote a square, the word *sama* refers to the equal length of the four sides and *caturasra* implies that the four angles are right angles.[1] A more plausible interpretation would be that *sama* refers to the form or shape of the figure which is to be the same in every respect and *caturasra* implying a quadrangle. It will then be consistent with the term *dīrgha-caturasra* for the rectangle, which implies that the form of the *caturasra* is in this case *dīrgha* or "longish".[2]

The names of rectilinear figures containing the word *koṇa* (="angle", "corner"), such as *trikona*, *catuṣkoṇa*, etc., meaning respectively the "trigonon," "tetragonon," etc., in general appears from the time of the *Sūryaprajñapti* (c. 500 B.C.)[3] and the *Pariśiṣṭas of the Atharvaveda*.[4] The names containing the word *bhuja* (="arm"), such as *tribhuja*, *caturbhuja etc.*, meaning respectively "trilateral", "quadrilateral" etc. are employed by Āryabhaṭa (499 A.D.)[5] and later writers[6] in the most general sense. The word *tribhuja* occurs once in the *Atharvaveda* (c. 3000 B.C.)[7] but it is doubtful whether in that instance, it means the "trilateral", as it usually does in later days

In the Prākṛta literatures of India, the names of rectilinear figures are found to be compounds of number names with the word *aṁsa* Thus in the *Dhammasaṁgaṇi*,[8] a Pali work written in c. 350 B C., probably earlier, we find the name *caturaṁsa* for the square *chalaṁsa* for the hexagon. *atthaṁsa* for the octagon and *solasaṁsa* for the hekkaidecagon. Similarly in Ardha

---

न्यूनाधिकप्रमाणसमतुल्यं समचतुरस्रं" । Commentary on *Sthānāṅga-sūtra*, vi. 3 (Sūtras 490–495).

[1] Thibaut, *S'ulva-sūtras*, p. 7.

[2] Compare "चतुरस्रे समे क्षेत्रे" or "चतुरस्रे समे क्षित्रम्" occurring in Prithudakasvāmi's commentary on *Brāhma-sphuṭa-siddhānta*.

[3] Sūtra 19; also 25. Euclid (c. 325 B.C.) uses τρίγωνον in the general sense to denote any triangle, whilst he restricts the use of τετράγωνον to the square only (Tropfke, *Elementar-Mathematik*, Bd IV, p.61).

[4] xxiii. 1. 5; xxv. 1, 3, 6, 7, 11; xxx. 1. 5 There is mention of *trikoṇa, catuskoṇa, pañcakona, saṭkoṇa, saptakona* and *aṣṭakona*

[5] *Āryabhaṭīya*, ii. 6, 11, 13.

[6] For instance see *Brāhmasphuṭa-siddhānta*, xii 21, 27, 29; *Mahā-siddhānta*, xv. 66, 68, 79, 103. In the latter work for the first time appear the names *pañcabhūja* and *ṣaḍabhūja* (xv. 102).

[7] viii. 9. 2

[8] This work is available in the Pāli original (ed. F. Müller, with its commentary *Atthasālini* of Buddhagoṣa) as well as in English translation (C. A. F. Rhys Davids, *Buddhist Psychology*); vide §, 617. For the date of composition see the introduction to the English translation. The term *aṭṭhaṁsa* occurs as early as in the *Dīgha Nikāya* (ed. Rhys Davids and Carpenter, vol. I, p. 76).

Māgadhī, the triangle is called *tamsa*, the square *caturamsa*, the hexagon *chalamsa* and the octagon *atthamsa*[1] The Prākrita word *amsa* is derived from the Sanskrit *aśra* (or *asra*) or from *amsa* and means the "point, corner or edge"[2] The Sanskrit word *amsa* means "shoulder," "corner of a quadrangle" In the *Śrauta-* and *Śulba-sūtras*[3] *amsa* denotes the "corner", particularly the two eastern corners of the quadrangular sacrificial altar.

The classification of triangles according to the sides (*sama-tribhuja*, *dvisama-tribhuja*, *visama-tribhuja*—equilateral, isosceles, scalene triangles) is clearly in evidence in India in the beginning of the seventh century after Christ[4] It probably began earlier. The classification according to the angles is absent here. Only the right-angled triangle is distinguished by the name *jātya-tribhuja* by Brahmagupta and others.[5] The oblique triangles are grouped according as the perpendicular (*lamba*) from a vertex on the opposite side falls inside or outside the figure, viz *antar-lamba* (in-perpendicular) and *bahir-lamba* (out-perpendicular)[6]

The classification of quadrilaterals according to the sides as well as the angles is more ancient and is found as early as in the *Sūryaprajñapti* (c 500 B C)[7] The side nomenclature appears still earlier in the *Śulba-sūtras* (c 800 B C)[8] *sama-caturasra* (square) and *dīrgha-caturasra* (rectangle). Often-times when there is no likelihood of an ambiguity, the prefix *sama* is deleted, so that only the term *caturasra* is used to denote the square[9] The rectangle is also called *āyata-caturasra* This

---

[1] Vide *Uttarādhyāyana-sūtra* (ed Charpentier), xxxvi. 22, 44–47; *Jambudvipa-prajñapti-sūtra*, *Sūtra* 54. *Sūtrakṛtanga-sūtra* ii 1. 15, *Bhagabatī-sūtra*, *Sūtra* 724–6, and other works

[2] *Pāli-English Dictionary* on "aṃsa", "aṃsi" and "aṃsa"; *Abhidhāna-Rājendra* on *amsa*

[3] *Āpastamba Śrauta-sūtra*, viii 5. 20, xi. 4 13; xii. 17. 21, etc.; *Baudhāyana Śulba-sūtra*, i. 34, 40, 44, iii 70, 75

[4] *Brāhma-sphuta-siddhānta*, xii. 29, 33, 34.

[5] *Ibid.*, xii. 38

The Sanskrit word *jātya* means "noble," "well born," "genuine." Hence the implication underlying the name *jātya-tribhuja* for the right angled triangle seems to be that all other triangles can be supposed to be derived from it. Thus the right-angled variety is the only "*genuine*" *or* "*noble*" kind of triangles. In fact, in solving the indeterminate problem of the solution of triangles in general Brahmagupta has always a method of solution by the juxtaposition of two right-angled triangles. He has further extended this method to the solution of certain quadrilaterals, particularly to the solution of convex quadrilaterals which now goes by his name

[6] Colebrooke, *Hindu Algebra*, p 58 fn.

[7] Sūtras 9 and 25.

[8] *Āpastamba Śulba-sūtra*: ii. 7, iii. 1; iv 6; v. 7; ix. 6 etc. *Baudhāyana Śulba-sūtra*: i 36, 45, 48, 52, 54, etc. *Kātyāyana Śulba-pariśiṣṭa*: i 16, 17, 29; ii. 11, 12, 21.

[9] Compare *Āpastamba*: i. 5, ii. 4, 5, etc.; *Baudhāyana*: i. 22, 28, 50,

term occurs in the *Gṛhy-sūtras*.[1] But it is more common in the early Jaina *sūtras*.[2] And that is the usual name for the rectangle in later works.[3] There are now generally distinguished five kinds of quadrilaterals: [4] *sama-caturbhuja*, *āyata-caturbhuja*, *dvisama-caturbhuja*, *trisama-caturbhuja*, and *viṣama-caturbhuja*. Ganeśa's classification of the quadrilaterals is more thorough. According to him, "Quadrangle also is in the first place two fold: with equal or with unequal diagonals. The first of these or equi-diagonal tetragon (*sama-karṇa caturbhuja*) comprises four distinctions: 1st *sama-caturbhuja*, equilateral, a square, 2d *viṣama-caturbhuja*, a trapezium, 3d *āyata-dīrgha-caturaśra*, oblong quadrangle, an oblique parallelogram; 4th *āyata-sama-lamba*, oblong with equal perpendiculars; that is, a rectangle. The second sort of quadrangle, or the tetragon with unequal diagonals (*viṣama-karṇa-caturbhuja*) embraces six sorts. 1st *sama-caturbhuja*, equilateral, a rhomb; 2nd *sama-tribhuja*, containing three sides equal; 3rd *sama-dvi-dvi-bhuja*, consisting of two pairs of equal sides, a rhomboid, 4th *sama-dvi-bhuja*, having two sides equal; 5th *viṣama-caturbhuja*, composed of four unequal sides, a trapezium, 6th *sama-lamba*, having equal perpendiculars, a trapezoid"[5]

To recapitulate: it has been proved conclusively that the early Hindus followed the usage of naming the rectilinear figures according to the number of sides as well as of angles. The early Greeks also followed the same practice. But while with the Greeks the side-nomenclature is older than the angle-nomenclature with the Hindus quite the contrary is the case. Amongst the Greeks the angle-nomenclature appeared after the time of Thales and his school (*c.* 600-500 B.C.), whereas amongst the Hindus it is found to have existed from long before in the Vedic age.

After the above had been sent to the press, Dr. Gandz has published (*Isis*, xii, pp. 452–481) a very interesting and instructive article on "The origin of angle-geometry," a section of which (§ VI) deals with the early history of the nomenclature of the rectilinear geometrical figures. His conjecture that "the observation of the corners and angles and the classification

---

etc. *Kātyāyana*: ii. 6. Similar use is largest in the *Āpastamba Śulba-sūtra* and least in the *Kātyāyana Śulba-sūtra*.

[1] *Aśvālayana Gṛhya-sūtra*

[2] *Bhagabatī-sūtra*, Sūtra 724.

[3] In the *Mahāsiddhānta* of Āryabhata II (*c.* 950), the rectangle is called *ardha-sama-caturasra* (literally "semi-equi-quadrilateral") (xv. 67, 78, 81).

[4] *Brāhma-sphuṭa-siddhānta*, xii. 35-38; *Ganita-sāra-saṁgraha*, vii. 5. For the classification according to Prithudakasvāmī (860), vide Colebrooke, *Hindu Algebra*, p. 295 f.n. 1.

[5] Colebrooke, *Hindu Algebra*, p. 58 foot note. The Sanskrit transliteration in this quotation has been altered in order to make it conform to the modern method.

according to their number seems to be distinctly Greek, a specific invention of Greek science, based upon the introduction of angle-geometry," (p. 473) will be found to be erroneous in the light of what has been stated above on the basis of the ancient literature of the Hindus

## Some Reflections on Zoological Research in India

By BAINI PRASHAD

The title of this paper may appear somewhat misleading, for I do not propose inflicting on you to-day a sermon on what are well-known facts to most zoologists who have given any time and attention to research. My object in reading this paper to-day is to draw your attention to various pitfalls and obstacles which abound in the way of young workers who start original zoological research either for the sake of preparing a thesis for some examination or to start on a career of research. I do not propose to lay down various "rules of thumb", which will make zoological research quite simple and easy; but from my experience of the past fourteen years, during which time I have had exceptional opportunities of studying not only the difficulties and deficiencies of young students but also of helping a fair number of young workers and doing some work myself, I believe that it is possible to indicate what is lacking.

With a young worker the selection of the subject for his research is the first consideration In this connection professors, teachers, or supervisors can help a great deal, but, so far as can be judged from the results, very little attention seems to be paid to this very important issue There is no dearth of problems in India; the field is very wide, and the problems awaiting investigation are not only innumerable but varied and suited to the capacities and tastes of almost all types of workers It should not, therefore, be a matter of any great difficulty to find something that will suit a worker, but the type of work, which is mostly sent for publication or in connection with which students often come to the Indian Museum for consulting either the literature or the collections, leaves little reason to doubt that students had started work without considering either their own capabilities or the resources which they could possibly have at their disposal for carrying out a certain piece of research. For example, several workers start on taxonomic investigations on a group or a class of animals without being acquainted with or having for reference even the most essential monographic works on the group. They have never examined any big named collections and often do not have even a single authentically named specimen of any genus or species for comparision or to help them to understand the short and often very technical descriptions

of the systematists. There is, no doubt, that in such cases the temptation for the young worker of seeing his name printed after the names of the new species or genera, which he may find and describe, is very great, but it should not be forgotten that taxonomic work on howsoever neglected a group of animals is not so easy as is generally imagined. Taxonomy, to put it briefly, has developed into a science by itself and for any one to believe that he or she can easily describe new species or genera is nothing short of folly. As the late Dr Annandale put it, taxonomic "zoology has become so complicated that few of us now-a-days are more than 'Scarabees.' This is an immoral state, not only because no man has the right to narrow his interests to a single family of beetles but also because the whole of biology is at present encumbered with unco-ordinated details that clog the machinery of progress instead of acting as motive power". This may be as it is, but we have to face facts and not simply to ignore them

To consider only a few of the difficulties which one encounters in such work, it may be mentioned that the literature necessary for taxonomic work is usually very extensive, sometimes scattered in obscure and not easily accessible journals or separate publications and as is often the case, published in various languages, while for workers just starting research the short and terse descriptions of the older authors are worse than useless for the correct identification of the material they are working out.

I have been working for nearly ten years on Molluscs and cannot even after all this experience claim to be fully acquainted with the literature on all families and genera of Molluscs. Even now it takes me some time before I can get together all the necessary literature, and this in spite of the fact that I have an almost complete 'separate' library, properly indexed and catalogued, of my own, and have in addition the excellent collections in the libraries of the Zoological Survey of India, the Geological Survey of India, and the Asiatic Society of Bengal within easy reach. Another more serious mistake in this connection made by students is to start investigations on cytological or histological problems on animals the specific identity of which they do not know Specimens of a Land Isopod, the Spermatogenesis of which was being investigated by a student, were once sent to the Indian Museum for identification It was found that the specimens sent were not all representatives of one species but actually belonged to two distinct genera, and it was not possible at that stage to decide which form the student had been studying. This shows how necessary it is for young workers to exercise due care in reference to the material on which they start working and how essential it is to have the

material identified beforehand. The Zoological Survey of India is always ready to help in this connection and the students are themselves to blame if they do not take advantage of the proffered help.

Considering next the names of the different animals, it has to be remembered that the acceptance or rejection of names is not left to any author's fancy, for if this were the case the science of Zoology would soon reach a stage when it would be difficult, if not impossible, for any worker to understand the writings of other authors, and since taxonomic zoology has a world-wide application, systematists have attempted at various times to adopt rigid rules of nomenclature In accordance with these rules an animal can have only one name; a name that is valid not only in the country where it is proposed but all over the world Linnaeus[1], the father of modern biological nomenclature, apprehending the necessity of a taxonomic standard, proposed in 1751 a set of rules for giving names to plants and animals. This Linnean code was naturally not very complete and various efforts have been made to improve it The most important set of rules in this connection and to which zoological science owes a great deal was the so-called Stricklandian Code, or the British Association Code[2] It was prepared at the instance of the British Association for the Advancement of Science in 1842 and was adopted by Section D (Zoology) of the British Association at its meeting of 1842: these rules were later revised in the meeting of the British Association in 1865.[3] Dall[4], in 1877, prepared an excellent set of rules at the instance of the American Association for the Advancement of Science. It is not necessary to consider the special code which was adopted in 1885 by the American Ornithologists' Union[5], as it was very limited in its application. The first code of nomenclature to be adopted by an International Committee was proposed by Blanchard[6] at the first meeting of the International Zoological Congress at Paris in 1889 The proposed code was slightly modified at the

---

[1] Linnaeus, E C.—*Philosophia botanica* (Holmiae, 1751) This was republished by Agassiz in his *Nomenclator Zoologicus* fasc. ix, preface pp. v-xix. (Soloduri, 1846).

[2] Strickland, H E.—Report of a Committee appointed "to consider the Rules by which the nomenclature of Zoology may be established on a uniform and permanent basis", pp. 1-17 (London, 1842) Also printed in *Rept. Brit. Assoc. Adv. Sci* for 1842, XII, pp. 105-121 (1843).

[3] *Rept. Brit. Assoc. Adv. Sci.* for 1865, XXXV, pp. 25-42 (1866).

[4] Dall, W. H. *Proceed. Amer. Assoc. Adv Sci*, XXVI, pp. 7-57 (1877).

[5] *The Code of Nomenclature and Check-List of North American Birds, etc.* (New York, 1886).

[6] *Compte Rend. Cong. Internat. Zool. Paris*, I, pp. 333-404 (1889)

second meeting of the Congress in 1892 at Moscow[1]. In 1894 the German Zoological Society[2] adopted a code of its own, originally prepared by a Committee consisting of Carus, Döderlein, and Möbius, but later somewhat modified it as a result of further discussions. In 1895, the Third International Zoological Congress at Leiden[3] considered the whole situation, and found that the English systematists followed the Stricklandian Code, the German systematists the German code, while the American systematists were divided between the Stricklandian, the American Ornithological Union, the Dall, and the International codes. As a result of the discussions at this Congress an International Commission of five members was appointed to study all the codes and prepare a general set of rules. The discussions were continued in the fourth meeting of the Congress, and it was not till the fifth meeting at Berlin[4] in 1901 that the final code was adopted and published. Some difficulties still exist, for in the Stricklandian Code, referred to above, the twelfth edition of Linnaeus's monumental work *Systema Naturae*, published in 1766, was taken as the starting point for modern zoological nomenclature. In the International Rules, however, the tenth edition of the *Systema Naturae*, which was published in 1758, was adopted as the starting point for the operation of the law of priority. In spite of this most English systematists still stick to the Stricklandian code and have not adopted the tenth edition as the basis for the determination of the valid generic, subgeneric or specific names. The rules of zoological nomenclature are very clearly enunciated, and have been published *in extenso* on several occasions. A recent edition of the rules with a *resumé* of the opinions 1–90 of the International Commission in reference to the various points referred to this body for opinion, was published in 1926[5] in the Proceedings of the Biological Society of Washington, while the complete set of opinions is published by the Smithsonian Institution of Washington in America in various volumes of its miscellaneous collections.[6]

In this connection attention may also be directed to the fact that owing to the absence of scientific periodicals during the

---

[1] *Cong. Internat. Zool. Moscou*, II, pt. ii, pp. 1-83 (Moscou, 1893).

[2] *Verhandl. Deutsch. Zool. Gesellsch.*, IV, *Jahresversam.* pp. 36, 37 (1894). The rules were published in the previous volume of the same work, pp. 89-98 (1894).

[3] *Comp. Rend. Trois. Cong. Internat. Zool.* pp. 93-95 (Leyde, 1896).

[4] *Verhandl. V. Internat. Zool. Congr. Berlin*, pp. 964-972 (Jena, 1902). The same rules in German and French are published on pp. 935-960.

[5] *Proc. Biol. Soc. Washington*, XXXIX, pp. 75-103 (1926).

[6] The above historical account is partly based on Stile's admirable review in *United States Treasury Department, Hygienic Laboratory Bulletin*, No. 24, pp. 7-9 (1905).

latter half of the eighteenth and first half of the ninenteenth century, works were either published in some obscure journals, or what was worse, as separate books, catalogues, or lists, of very limited editions and of which unfortunately copies are not available except in a few libraries or private collections. The validity of such works is often a matter of great doubt, and there can be no doubt that they have in several instances caused endless confusion in zoological nomenclature.

Another difficulty is in reference to the selection of names for new genera and species. For a long time work in this connection was almost hopeless, for one could never be certain whether a name had already been used in literature or not. Thanks, however, to the works of Agassiz[1], Marschall[2], Scudder[3], Waterhouse[4], the *Zoological Record*[5] and the *Nomenclator Animalium generum et subgenerum*[6], it is now possible for workers to find out what names are preoccupied Even with the information available in these works the labour involved in hunting up old names is so colossal that it is not easy, except for people exceptionally fortunate in having extensive reference libraries at their disposal, to find out the names that have previously been used For the names of species the work is still more difficult, though thanks to the herculean labours of Sherborn in the preparation of his wonderful work, *Index Animalium*[7], the task has been made considerably lighter.

There can be no doubt that the search for the correct names of genera and species has often been carried a little too far, and in trying to clear the confusion the authorities concerned have often made the state of affairs much worse.

---

1 Agassiz, J L R *Nomenclator Zoologicus*, etc. Fasc. i-x (Soloduri, 1842-46) and *Nomenclatoris Zoologici Index Universalis* (Soloduri, 1846).

2 Marschall, A F. *Nomenclator Zoologicus*, etc. (Vindobonae, 1873).

3 Scudder, S H *Nomenclator Zoologicus*, etc. *Bull U. S. Nat. Mus.* No. xix (1882). This work contains a list of all generic names published up to the end of 1879.

4 Waterhouse, C. O. *Index Zoologicus* (1902). This work has an alphabetical list of genera and subgenera proposed for use in Zoology and as recorded in the "Zoological Record" for 1880-1900; it is thus a supplement to Scudder's work noted above. The second volume of this work which was published in 1912 contains a list from the same source for the years 1901-1910.

5 An alphabetical list of all generic and subgeneric names proposed during the year is published at the end of each volume of the "Zoological Record".

6 This work contains a list of all generic and subgeneric names from 1758-1922. The work is in progress and in the parts so far published names beginning with the letter E have been listed.

7 *Index Animalium* Sect. I, 1758-1800 (Cambridge, 1902). Sect. II, 1801-1850 (up to June 1929, 19 parts of this work indexing names up to *Phyllochorea* have been published); the second part is a publication of the British Museum (Nat. Hist.), London.

All the same except for the *nomina conservanda*[1] correct names in accordance with the provisions laid down in the International Rules must be used

The nomenclature of types and their location is another source of trouble According to the rules of the Zoological Nomenclature types must be deposited in some recognized institution where they will, if necessary, be available to future workers for reference This is a point which deserves special consideration in India, for unfortunately most of the young workers do not realize that the absence of such material may cast doubts on the authenticity of their results

The young workers will, in view of what has been said above, do well to leave taxonomic work alone unless they are working at a place where well-equipped reference libraries and big named collections of different groups are available The description of new species or genera is not of much value unless it is properly carried out, while many of the so-called revisions of different families of animals, which are published now-a-days, simply make the already unwieldy literature more cumbersome. It is, therefore, advisable for young workers to devote their energies in the beginning to other more profitable lines of research and reserve taxonomic work for a much later stage in their career when they have had some experience and have better opportunities for such work

Work on morphological, histological, cytological ecological and other similar problems is much simpler, in so far as extensive literature is not always required for reference nor are big named collections essential for comparison. Before starting work on any problem, it is necessary to be certain that the work has not already been done for the adage " there is nothing new under the Sun " is nowhere more truly applicable than in the case of any problem which a young student proposes to investigate Many supposed new problems are on looking up the literature found to have been worked out in detail already. I know of cases where excellent work had been done, but which was practically of no value owing to the same work having been published many years before

In reference to looking up literature I would suggest the following procedure; which I adopt myself and which has almost always proved quite efficient in getting together the necessary literature. I first look through various textbooks and standard books of reference like Sedgwick's Textbook of Zoology, Cambridge Natural History Series, Ray Lankester's Treatise on Zoology, Lang's Textbook of Comparative Ana-

---

[1] A list of the *nomina conservanda* was prepared by Apstein and his collaborators in 1915 and is published in *Sitzungsber. Gesell. Naturfor. Freunde Berlin*, pp 119-202 (1915). This list, however, is not recognized by the International Commission of Zoological Nomenclature.

tomy, Delage & Herouard's Traité de Zoologie Concrete, Claus-Grobben's Lehrbuch der Zoologie, Kükenthal's recent Handbuch der Zoologie, and, above all, H. G. Brónn's Die Klassen und Ordnungen des Thierreichs[1]. All these works contain extensive bibliographies on the different classes of animals, and one is sure to find in them some sort of monographic work in which most of the earlier literature on any particular subject is collected up to a certain date. In case of no monographic works being available, the best course is to start systematically and in this connection the best procedure is to look up first Engelmann's three volumes in *Bibliotheca Zoologica*[2] in which classified lists of literature on all groups of the Animal Kingdom from 1700–1860 will be found The work is still in course of publication and the later volumes deal with the works published after 1860, but these recent volumes are not so exhaustive as the earlier ones. From 1864 onwards most of the Zoological literature is classified in the annual issues of "Zoological Record", but unfortunately this work has not been able to maintain its earlier standard, and the recent volumes do not include references to all the work that is published in various countries and in different journals or books. In addition to the above, therefore, one has to consult Abteilung B of Wiegmann's "Archiv. fur Naturgeschichte"[3], "Zoologischer Anzeiger"[4] and "Zoologischer Jahresbericht".[5]

---

[1] This work was started under the editorship of H G. Bronn in 1859 and is still being published by the Akademische Verlag, Leipzig. A large number of volumes of this work dealing with almost all classes of animals have been published already.

[2] Engelmann, W *Bibliotheca Historico-Naturalis*. Vol. I (1846) deals with the literature published during 1700-1846. Vols. II & III by J. V Carus and W. Engelmann are for 1846-1860 (1861) Further volumes were prepared by O Taschenberg and 7 complete volumes and 3 parts have been published so far The name of the work from Vol. II onwards was changed to *Bibliotheca Zoologica*.

[3] In Vol. 1, published in 1835, the literature lists for 1834 were included but from Vol. II onwards a second volume was devoted to this work At present, this volume is called Abteilung B, and usually 2-3 volumes are published every year. Several volumes of Abteilung B, though published, have not been issued so far, and the work since the War is very much out of date.

[4] In Carus's *Zoologischer Anzeiger* which was started in 1878 a literature list on different classes of animals used to be published in each volume. This was discontinued with the foundation of the "Bureau international bibliographique de Zurich" in 1896, which institute under the capable management of D. H. H Field started publishing Index Cards of Literature. The entire list was also published as *Bibliographia Zoologica* in a supplementary volume to *Zoologischer Anzeiger* every year.

[5] This work was started in 1879 by Dr A. Dohrn, the founder of the Zoological Station at Naples. It differs from other works in that it contained summaries of the more important works. The last volume for 1913 was published in 1924 and the publication has since been discontinued.

One must also look up most of the current zoological literature to find out whether anything on the subject has been published within recent years, and in this connection the reviews published in such works as "Nature", "Zoologische Berichte", "Journal of the Royal Microscopical Society", "Anatomischer Anzeiger", "Review of Applied Entomology", and several other journals are of great help. The recently started serial, "Biological Abstracts", should, when the work is fully organized, also prove very helpful.

According to some authorities it is not necessary to look up previous work till the research one is doing has been completed. I, on the other hand, have found that it saves a great deal of worry and unnecessary work if one has gone through the relevant literature on the subject in good time. It is then possible not only to complete the work in a much shorter time, but also to pay more attention to the lines in which the previous work is faulty.

It is very difficult to lay down the limits to be assigned to the discussion of the previous work. In this connection young students will find it very valuable to read through some contributions by a few of the leading authorities in some standard zoological periodicals. This will enable them to adopt the best method of discussing the literature and to decide the limits of such discussions. This is particularly necessary, as young workers often include long extracts and summaries of previous work, which have no bearing on the subject, while most of the really important literature is only casually treated. There are also several instances of young authors including discussions of general problems which they cannot justify from the results of their work; naturally such discussions and conclusions are often not only unjustified but in most cases are of no value whatever. In this connection Dr. Annandale's Presidential Address which he delivered before the Zoology Section of the Indian Science Congress at Madras in 1922,[1] should be studied carefully by young workers; it contains most valuable hints on how a paper should be prepared.

The question of citing the literature in a paper is rather difficult, as different methods are adopted by different periodicals, but a worker must follow the method which is in vogue in the journal where he proposes to publish his work, above all, he must be consistent. It is also necessary to exercise great care in giving correct titles of all references, and, save in very exceptional cases, references should not be included to works which one has not been able to consult.

---

[1] Annandale, N. *Ethic of Zoology Proc. IX Indian Science Congress*, pp. 79-91 (Calcutta, 1923).

Another aspect of the work, which I propose considering here, is the mechanical preparation of the manuscript. During the periods of my editorship of the two leading zoological journals in this country and while acting as referee on papers offered to other societies for publication I have found that several of the so-called finished products of research were, owing to the careless way in which these had been made "press-ready", full of mistakes that could easily have been corrected by the authors themselves. This carelessness not only makes the work of the editor almost impossible, but often on the score of time and labour necessary to bring them to a standard fit for publication, makes him reject such communications. If in exceptional cases the editor has been indulgent enough to accept some papers and do the work of editing or rather rewriting them, it should not be inferred that he will always do so. In fact he will. owing to what he has had to do in one instance, be more careful in the future, and refuse any works that are not in a finished form. In this connection I may perhaps be excused for quoting from the presidential address of the late Dr. N. Annandale referred to above.

"Apart from literary style in the writing of zoological papers, the question of the mechanical preparation of the manuscript for the press is one of ethical significance As the editor of the *Record* (*sic Records*) and *Memoirs of the Indian Museum* I often receive manuscripts that need many hours' careful and troublesome work before they can be sent to the printer If it were not for the fact that Dr. Kemp is kind enough to relieve me of much of this drudgery, I would scarcely hesitate to refuse to consider a great part of the matter submitted for publication. Carelessness or ignorance as to punctuation and the use of capitals is rife, and few authors take any trouble in indicating the use of italics or other special type. It is surprising how few zoologists know even such elementary rules as that of the proper use of brackets with the names of the authors of species. These names should never be enclosed in brackets, unless the name of the genus of the species had been changed since the latter was first described. These may seem trivial points, but their neglect indicates not only carelessness, but selfishness and lack of understanding "

In spite of the above sound advice I find that little attention is paid to the mechanical preparation of the paper, and as a result several excellent contributions lose a great deal in value. The authors, further, owing to not properly preparing their manuscripts are, besides being dubbed selfish and careless, responsible for delay in the publication of their results.

Attention must also be paid to the careful preparation of illustrations which are to be published in a contribution.

Unnecessary figures should be avoided, as. owing to the great cost of reproduction now-a-days, few societies or journals can publish a large number of figures or plates. The drawings should be clear, simple, and as true to nature as possible, and should be finished in a style fit for reproduction

I am afraid I have given you a somewhat disjointed account of what is often lacking in the original zoological work that is being carried on now-a-days in India I have tried to indicate what kind of work should not be attempted unless facilities for carrying it out properly are available, how literature should be looked up, and have also dealt with the question of the mechanical preparation of the manuscripts and the illustrations. I have devoted a great deal of my remarks to systematic work and the strict observance of the International Rules of Zoological Nomenclature, as it is in connection with these that most of our young workers make mistakes I shall feel fully repaid if these suggestions help young workers in their work and result in their paying more attention to what are considered, by some, trivial points but which really determine to a very great extent the value and usefulness of any original research.

- - -

# Notes on the Arterial System of the common Indian Toad *Bufo melanostictus* Schneid

By JNANENDRA LAL BHADURI

*(Read at the Meeting of the Sixteenth Indian Science Congress, and published with the permission of the Director, Zoological Survey of India.)*

## I. INTRODUCTION.

*Bufo melanostictus* Schneid. is one of the commonest Indian toads and is used for dissection as a type of the Anura in several Indian Universities. The general anatomy of *Bufo* corresponds to that of *Rana*, but there are several differences which are so marked that practical note books containing descriptions of *Rana* are of no value for dissections of *Bufo*. During my tenure of office as a Demonstrator in Zoology in the University of Calcutta, I investigated the vascular system of *Bufo melanostictus*. In the course of my work on the arterial system I observed some constant and marked differences, mainly in reference to the branches of the systemic arches and the dorsal aorta from the other types of Anurans which have been described so far Since these differences have not been noticed in any other type, a general illustrated account of the arterial system will, I hope, prove useful. In the following account, however, no attempt is made to treat in detail the various arteries but only the general course of the arteries, as is followed in practical classes, is described.

No account of the vascular system of *Bufo* was published previous to the short notice in Crawshay's paper (2) on the variations in the arterial systems of the Anurans His remarks in reference to the genus *Bufo* were based on dissections of one specimen each of *Bufo boreas* and *Bufo mauritanicus*, and according to him the toads of this genus do not markedly deviate from the frogs of the genus *Rana*.

The only other work, which refers to *Bufo melanostictus*, is that of Ghosh in his elementary account of the anatomy of some common Indian Vertebrates (4), but his account of the vascular system of this toad is rather incomplete, while the drawings are far from satisfactory.

I have here to record my sincere thanks to Dr Baini Prashad, Officiating Director of the Zoological Survey of India, for his kind criticism, assistance and valuable suggestions.

## II. Material and Method.

This account is based on an examination of a large number of injected specimens of *Bufo melanostictus* collected in Calcutta. The observations on the chief peculiarities were further substantiated during my demonstration to the practical classes of the Calcutta University.

The injected fluid used for studying the main arteries is the one recommended by Parker and Parker (*loc. cit.*, p. 99). Before injecting the fluid the arteries were washed with normal saline solution and the vessels were later injected through the ventricle via the conus.

## III. Description of the Arterial System

*Conus arteriosus and Truncus arteriosus* (Fig. 1)

To avoid confusion it is necessary to preface my account with a short description of the conus arteriosus and the truncus arteriosus.

The conus aretriosus (*co.a.*), as in all Anurans, arises ventrally and somewhat anteriorly from the right side of the ventricle (*ven.*), and then passes obliquely forward across the auricles. It is muscular, but its walls are not so thick as those of the ventricle. The conus, though not very distinctly marked off from its further continuation which is termed the truncus, can, however, be considered to terminate at the slightly constricted region whence a very short tubular structure of almost uniform diameter runs forward; this corresponds to what Gaupp (*loc. cit.*, p. 277) terms the truncus arteriosus impar (*t.a.i.*). The truncus impar bifurcates into two trunks, a right and a left, which have respectively been termed as the truncus arteriosus dexter (*t.a.d.*) and the truncus arteriosus sinster (*t.a.s.*)[1]. Each of these truncii consists of three vessels enclosed for some distance in a common sheath and appears externally as a single vessel, but is divided by two internal partitions into three chambers which are known as the canalis caroticus, the canalis aorticus, and the canalis pulmo-cutaneous. After running a short distance the three canalicular vessels separate to form the beginnings of the three main arterial arches *viz.* the carotid (*c.a.*), the systemic (*s.a.*) and the pulmo-cutaneous (*p-c.a.*).

---

[1] In spite of Gaupp (3) having rightly considered the conus and the truncus as two distinct structures Marriner (6), Ghosh (4) and several other authors have described the two together under the term truncus arteriosus.

*Bulbis cordis artery* (Fig. 1). Before describing the arteries of the three great arterial arches it is convenient to consider here the artery which supplies the conus arteriosus (*co.a.*). It is called the bulbis cordis artery (*b.c.a.*). It arises from the ventral root of the right canalis caroticus

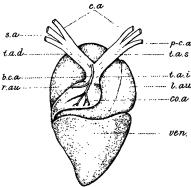



FIG. 1.—Ventral aspect of the heart and arterial arches of *Bufo melanostictus*.

*b.c.a.*—bulbis cordis artery.
*c.a.*—carotid arches.
*co a.*—conus arteriosus.
*l.au.*—left auricle.
*p-c a.*—pulmo-cutaneous arch.
*r.au.*—right auricle.
*s.a*—systemic arch.
*t a.i.*—truncus arteriosus impar.
*t.a.d.*—truncus arteriosus dexter.
*t.a.s.*—truncus arteriosus sinster
*ven.*—ventricle.

and runs backwards over the truncus arteriosus impar (*t.a.i.*) to reach the anterior end of the conus. Here it divides into two main branches which supply the ventral and dorsal surfaces of the conus arteriosus. Buibls cordis artery is, as is usually seen in the frogs, distributed on the conus only and is not seen to proceed beyond it.

In several dissections I found that this artery was liable to a great deal of variation. In two or three specimens of *Bufo melanostictus* this artery was found to originate from the left canalis caroticus, as observed by Crawshay (2) in *Bufo mauritanicus*, while in another specimen there were two arteries arising separately, one from the normal position and the other from the anterior point of bifurcation of the truncus impar for supplying the conus walls.[1]

### 1. *Carotid arch* (Figs. 2 and 8).

Of the three arterial arches the most anterior one, the carotid arch (*c.a.*) is concerned with the blood supply of the head and the brain Each carotid arch shortly after its origin from the canalis caroticus swells out into a small and almost spherical bulging, the carotid labyrinth (*c.l.*) which is often referred to as 'carotid gland' in literature.

#### (*i*) *External carotid artery.*

Just before expanding into the carotid labyrinth the arch gives off a slender branch—the external carotid artery (*e.c.a.*) or the lingual artery of various authors It runs ventrally inwards and forwards over the throat, and sends several branches to the thyroid glands, the hyoid apparatus and its associated muscles, while its main trunk supplies the tongue.

#### (*ii*) *Internal carotid artery.*

The main artery from the carotid labyrinth (*c l*) is continued as the internal carotid artery (fig. 8, *i.c.a* )—the carotid artery of most authors It runs superficially for a very short distance and then curves round immediately between the petrohyoideus muscles. The portion of the artery lying in between these muscles was found to be greatly compressed in both injected and uninjected specimens; this can be seen by carefully removing the petrohyoideus muscles. Emerging from the muscles it runs round the œsophagus in close proximity to the systemic arch (*s.a.r.* and *s.a.l.*)

---

1 Hyrtl, as mentioned by Gaupp (3), was the first to observe the origin of this artery from the ventral root of the canalis caroticus dexter and also from the truncus arteriosus dexter in *Bufo vulgaris*. This has been confirmed by Gaupp in *Rana esculenta* Crawshay (2) has, however, shown that the origin of this artery is very variable in the different groups of Anura He found that in *Rana tigrina*, *R clamata* and *R. catesbiana* it arises from the base of the right canalis caroticus; in *R. hexadactyla* from the same canal but close to its margin; in *Bufo boreas* from the base of the right canalis aorticus, and in *B. mauritanicus* from the base of the left canalis caroticus.

and nearly overlaps it about the origin of the subclavian and the occipito-vertebral arteries (Fig 8, *sub.a.* and *oc-v.a.*). These two arteries here are enclosed in a common sheath of tissue which may be called ligamentum caroticum [1] (Fig. 8, *l.c* ). The internal carotid artery (*i.c.a.*) then takes a very sharp bend

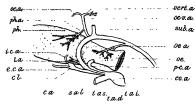



FIG. 2.—Lateral view of the anterior arterial system seen from the left side.

*c.a.*—carotid arch.
*c.l*—carotid labyrinth.
*co.a*—conus arteriosus
*e.c.a.*—external carotid artery.
*i.c.a.*—internal carotid artery
*l.a.*—laryngeal artery.
*oc.a.*—occipital artery.
*oc-v.a.*—occipito-vertebral artery.
*oe.*—oesophagus.
*oe.a.*—oesophageal artery.
*p-c.a.*—pulmo-cutaneous arch.
*ph.*—pharynx.
*ph.a.*—pharyngeal artery
*s.a.*—systemic arch.
*sub. a.*—subclavian artery.
*t.a.i*—truncus arteriosus impar.
*t.a.d.*—truncus arteriosus dexter
*t.a.s.*—truncus arteriosus sinister.
*vert. a.*—vertebral artery.

and runs inwards, forwards and dorsal to the pharynx to enter into the posterior angle of the orbit. It is to be noted that this artery from its origin to its entry into the skull, sends no branch whatsoever to any part of the surrounding tissues.

---

[1] The ligamentum caroticum has escaped the notice of most authors. It was noticed by Bourne (1) and Marshall (7) who described it as an impervious condition of the ductus Botalli. Gaupp (3), again, described it as an obliterated ductus arteriosus. It should, however, be noted that the embryonic connection between the systemic and the carotid is neither the ductus Botalli nor the ductus arteriosus, but is the true ductus caroticus. This discrepancy in nomenclature was clearly pointed out by O'Donoghue (8) in Reptiles where the embryonic connection of the different arches is very often retained in the adults.

## 2. *Systemic or Aortic arches* (Figs. 2 and 8).

The median arch of each side is known as the systemic or aortic arch (*s.a.*) of that particular side. Each arises from the canalis aorticus and winds obliquely round the œsophagus and then turns inwards and backwards to join its fellow from the opposite side in the middle line at about the level of the sixth vertebra. The right systemic arch is continued as the dorsal aorta (Fig. 8, *d.a.*) which runs backwards in the body cavity just ventral to the vertebral column and between the kidneys to about the middle of the urostyle where it bifurcates into the two iliac arteries (fig. 8, *i.a.*). The left systemic arch, after its union with the right arch, continues as the cœliaco-mesenteric artery (Fig. 8, *c–m a.*)

In *Bufo melanostictus* the number of branches given off from the two systemic arches is different. Four arteries arise from the left systemic arch (*s.a.l.*) and only three from the right (*s.a.r.*), there being no œsophageal branch on the right side. It will, therefore, be convenient to describe here the different branches of the left systemic artery.

### (*i*) *Laryngeal artery.*

The laryngeal artery (*l.a.*) is a short and stout vessel. It arises from the inner border of the systemic very near to its origin from the canalis aorticus. It passes dorsal to the carotid labyrinth (*c.l.*) to supply the larynx and its muscles.

### (*ii*) *Occipito-vertebral artery.*

The occipito-vertebral artery (*oc–v a.*) arises from the dorsal side of the systemic arch close to the origin of the subclavian artery (*sub a.*) and opposite the transverse process of the second vertebra. It runs slightly forwards and inwards into the back muscles between the atlas and the skull. It then devides dorsally, as in *Rana*, into the occipital and the vertebral arteries (Fig. 2, *oc.a.* and *vert.a.*) The most interesting feature in the course of the occipito-vertebral artery is that at a point about half-way between its origin from the systemic and its entry into the back muscles, it gives off a branch which runs backwards and upwards to supply the dorsal region of the pharynx. This may conveniently be called as the *pharyngeal artery*[1] (Fig. 2, *ph.a.*).

[1] This pharyngeal branch of the occipito-vertebral artery has not been described in any Anurans so far. Crawshay (2) shows the œsophageal artery in several species of *Rana* and *Bufo* as originating from the base of the occipito-vertebral artery to supply the œsophagus. This condition was found by me in dissections of the common Indian frog *Rana tigrina*, but in *Bufo melanostictus* the origin of the œsophageal artery is quite different; this is described in detail further on.

(*iii*) *Subclavian artery.*

The subclavian artery (*sub.a.*), which is very stout, is the largest of all arteries arising from the systemic arch It originates from the external border of the arch immediately behind the occipito-vertebral artery (*oc–v.a.*) and runs straight outwards alongside the brachial nerve. The pectoral girdle and the forelimb are supplied by several branches which vary greatly in number and distribution in different specimens.[1]

(*iv*) *Oesophageal artery.*

The oesophageal artery (*oe.a.*) is the last and the smallest of all the arteries arising from the left systemic arch (*s a l.*). As noted already it is present only on the left side, there being no corresponding branch from the right systemic. This artery arises from the inner border of the left systemic nearly half-way from the origin of the subclavian artery (*sub a.*) and the union of the right and left systemics. The part of the œsophagus (*oe.*) which lies between the two systemics is fed by this artery In one solitary instance only, during class demonstration, I found the œsophageal artery originating from the right systemic arch, and there was, however, no corresponding artery on the left side.

It is also of interest to note here that in the other Indian toad *Bufo stomaticus* also there is only a single œsophageal artery which originates from the left systemic arch in almost the same position as in *Bufo melanostictus*.[2]

---

[1] Crawshay (2) who has described the variations of the branches of the subclavian artery in different species of *Rana* and *Bufo*, and has also noted the extent of variation in different individuals of *Rana temporaria*, is of opinion that "a careful examination of a large number of individuals is still necessary to establish a satisfactory type of arrangement for the Anurans"

[2] Reference has already been made to the origin of the oesophageal arteries in frogs. They always arise from the two systemics in all the different types of Anura described by Crawshay (2) and other authors. The single origin of the oesophageal artery from the left systemic arch alone except in the two species of *Bufo* mentioned above has, however, not been observed in any Anura so far, and does not appear to the common in most forms. But very recently Rau (12) speaking of the origin of the oesophageal artery in *Ceratophrys* with reference to Crawshay's observations remarks that it "arises from a different level almost midway between the subclavian artery and the root of the dorsal aorta". The origin of this artery no doubt shows a similar position as in *Bufo*, but he does not mention particularly whether this is present only on the left side although his drawing (*loc. cit.*, fig. 1, p. 307) shows a single left-handed origin.

(*a*) Coeliaco-mesenteric artery (Fig. 3).

The coeliaco-mesenteric axis (*c-m a*) is a large unpaired artery which arises from the point of union of the two systemic arches (*s.a r.* and *s.a.l.*) and supplies the alimentary canal and its various appendages. After a short simple course it divides into two main branches, an anterior coeliac artery (*coel.a.*) and a posterior *mesenteric artery* (*mes a*) The latter name is suggested in view of the total absence of any posterior mesenteric artery as such which is commonly found in the frogs.

(*1*) *Coeliac artery.*

The coeliac artery (*coel.a.*) is not so large as its sister branch, the mesenteric. It supplies the whole of the stomach (*st.*), the liver. the gall bladder, and the greater part of the pancreas. The coeliac artery divides into two main branches:

(a) The left gastric artery (*g.a s.*) passes right up to the stomach (*st.*) and sends many fine branches to its dorsal part.

(b) The second branch is larger than the preceding in the sense that its main axis, which is called the right gastric artery (*g.a.d.*) mainly supplies the stomach, while a side branch generally styled as the hepatic artery (or rather the hepato-pancreatic artery) is given off to the liver In its course it sends several fine branches to the pancreas (*p a.*), and after reaching the liver it gives off two to three small branches to the gall bladder and finally breaks up in the substance of the liver into numerous ramifications.

(2) *Mesenteric artery.*

The mesenteric artery (*mes.a*) is, as usual, a long and large artery. It supplies the spleen and the whole of the intestine (*int.*) including the rectum (*re*). The first branch given off from this axis is the splenic artery (*spl a*) to the spleen. Generally the splenic artery arises from the mesenteric artery before any other intestinal arterial branches, but quite often it arises from the distal ramus of the intestinal arterial branch as was shown by Crawshay (2) to occur in some species of *Rana* and in *Bufo mauritanicus*.

The mesenteric artery can conveniently be divided into two main branches, of which the first or the proximal is chiefly concerned with the blood supply of the duodenum and the anterior part of the intestine. The distal branch is, however, a much ramifying stem which divides in the mesentery into a variable number of large and small vessels, which by further sub-divisions supply the rest of the intestine including the rectum as shown in the diagram.

Mention may be made here of the fact that the arterial blood supply of the pancreas is not derived entirely from the

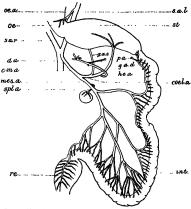



FIG. 3 —Ventral view of the arteries supplying the alimentary canal and its appendages.

c-m.a.—coeliaco-mesenteric artery.
coel. a.—coeliac artery.
d.a.—dorsal aorta.
g.a.d.—right gastric artery.
g.a.s.—left gastric artery.
he.a.—hepatic artery.
int.—intestine.
mes. a.—mesenteric artery.
oe —oesophagus.
oe a.—oesophageal artery
p.a.—pancreatic artery.
re.—rectum.
s.a.l.—left systemic artery.
s.a.r.—right systemic artery.
spl. a.—splenic artery.
st.—stomach.

hepatic artery but also from a small recurrent branch arising from the duodenal section of the mesenteric artery (*p.a*).

(*b*) Dorsal Aorta.

(*i*) *Urino-genital arteries* (Figs. 4,5,6 and 7).

The urino-genital arteries arise, as usual, by either unpaired or independent stems or both together from the ventral surface of the dorsal aorta between the kidneys. They supply the kidneys, the fat bodies, and the reproductive organs These arteries vary in number and position, as well as in respect of unpaired and independent stems. The extent of variation of these arteries in male and female toads is shown in Figs. 4,5,6, and 7, and an inspection of these figures will do away with the necessity of a detailed description of the individual arteries.

Occasionally the first of the true urino-genital arteries arises close to the base of the coeliaco-mesenteric artery or actually from the axis itself and supplies the anterior head of the kidney. Such a condition was found by Crawshay in *Bufo mauritanicus*, and I figure (Fig 5) a similar condition found by me in a specimen of *Bufo melanostictus*.

(*ii*) *Lumbar artery.*

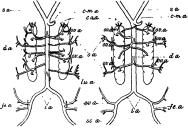
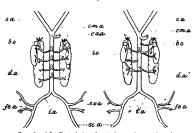
Attention may here be drawn to the fact that the lumbar arteries which are so characteristic of frogs, are altogether absent in *Bufo melanostictus*. In certain cases, a single lumbar artery was seen to originate from the terminal section of the dorsal aorta to supply the back muscles [1] (See Fig. 4).

(*iii*) *Posterior mesenteric artery.*

No trace of the posterior mesenteric artery, which is commonly present in the Ranids, was found in *Bufo melanostictus*. In two examples of *Bufo boreas* and *Bufo mauritanicus*, Crawshay, however, showed its origin, as is usual in frogs, from the median ventral line of the dorsal aorta between the last of the urino-genital arteries and the bifurcation of the aorta, and its absence indeed is very peculiar in the Indian toad *Bufo melanostictus*.

(*iv*) *Iliac artery* (Figs. 4,5,6,7 and 8).

As has been mentioned above, the dorsal aorta bifurcates about the middle of the length of the urostyle into two large trunks, the iliac arteries (*i.a.*). Each of the iliac arteries diverges

[1] Previous authors who have described examples of *Bufo* have not noted the absence of this artery. Crawshay (2) on the other hand, observes that "the *Aa lumbales* were not followed sufficiently for purpose of comparison."

Figs. 4 and 5.—Ventral view of posterior arteries in female toads.

Figs. 6 and 7.—Ventral view of posterior arteries in male toads.

Explanation of figures 4 to 7.

*b.o.*—Bidder's organ.
*c.a.a.*—corpus adiposum arteries.
*c-m.a.*—coeliaco-mesenteric artery.
*d.a.*—dorsal aorta.
*e-v.a.*—epigastrico-vesicalis artery.
*fe. a.*—femoral artery.
*i.a.*—iliac arteries.
*lu.a.*—lumbar artery.
*o.a.*—oviducoal arteries
*ov a.*—ovarian arteries.
*s.a.*—systemic artery.
*sc.a.*—sciatic artery.
*te.*—testis.

caudalwards and runs alongside the sciatic plexus towards the thigh, beyond which it continues as the sciatic artery or ishciatic artery (*sc.a.*). It sometimes runs between a nerve loop formed by the nerves of the sciatic plexus. Before reaching the thigh proper it sends off two very important arteries:

(*1*) Epigastrico vesicalis artery.

Epigastrico-vesicalis artery (*e-v a.*) is a very stout vessel, which runs laterally and divides into numerous branches to supply the bladder and the muscles of the adjoining region.

(2) Femoral artery.

The femoral artery (*fe.a.*) arises shortly after the above artery. It passes directly to the upper part of the thigh to supply its muscles.

In this connection it may also be noted that several grades of variations from the contiguous origin of the epigastrico-vesicalis and the femoral arteries to a distinct separation of the two have been observed in different specimens of this toad.

(*v*) *Ischiatic or sciatic artery.*

As mentioned above the ischiatic or sciatic artery (*sc.a.*) is the continuation of the iliac artery It supplies the rest of the hind-limb.

### 3. *Pulmo-cutaneous arch* (Fig. 8).

The pulmo-cutaneous arch (*p-c.a.*) is the hindmost of the three arches. It arises, as in frogs, from the pulmo-cutaneous canal and after a short simple course passes to the lung as the pulmonary artery (*pul.a*) giving off a slender branch to the skin, the cutaneous artery (*cut.a.*). This arch carries impure blood to be purified in the lungs and the skin.

(*i*) *Pulmonary artery.*

The pulmonary artery (*pul a.*) runs backwards to the root of the lungs where it ramifies into a large number of branches.

(*ii*) *Cutaneous artery.*

The cutaneous artery (*cut.a.*), as mentioned above, is a very slender artery. In its course it travels somewhat forwards, outwards and upwards and disappears between the angle of the jaw and the fore-limb. On reaching the skin it divides into numerous branches forming a rich anastomosis.

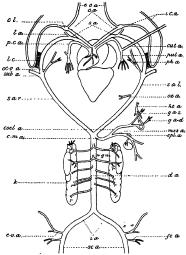



FIG. 8.—General course of the arterial system of *Bufo melanostictus.*

*c.a.*—carotid arches; *c.l.*—carotid labyrinth; *c-m.a.*—coeliaco-mesenteric artery; *coel. a.*—coeliac artery; *cut. a.*—cutaneous artery; *d.a.*—dorsal aorta; *e.c.a.*—external carotid arteries; *e-v.a*—epigastrico-vesicalis artery; *fe.a.*—femoral artery; *g.a.d.*—gastric artery dexter; *g.a.s.*—gastric artery sinister; *he. a.*—hepatic artery; *i.a.*—iliac arteries; *i.c.a.*—internal carotid artery; *k.*—kidney; *l.a.*—laryngeal artery; *l.c.*—ligamentum caroticum; *mes. a.*—mesenteric artery; *oc-v.a.*—occipito-vertebral artery; *oe.a.*—oesophageal artery; *p-c.a.*—pulmo-cutaneous arch; *ph.a.*—pharyngeal artery; *pul.a.*—pulmonary artery; *r.*—renal artery; *s.a.*—systemic arches; *s.a.l.*—left systemic artery; *s.a.r.*—right systemic artery; *sc.a.*—sciatic arteries; *spl.a.*—splenic artery; *sub. a.*—subclavian artery; *u-g.a.*—urino-genital arteries.

## IV. Summary.

The arterial system of *Bufo melanostictus* differs in several respects from that of the other types of Anurans which have been described so far In the above account the arterial system of this toad is described in fair detail, the modern revised nomenclature for different arteries being used in the description.

(i) The two structures, the conus and the truncus arteriosuses, are distinguished and their relative situation distinctly outlined. The further subdivisions of the truncus arteriosus are also described.

(ii) The internal carotid artery and the systemic are enclosed in a solid strand of tissue, which from its homology with other groups is termed *ligamentum caroticum* in the above account

(iii) A pharyngeal branch of the occipito-vertebral artery is recorded for the first time in Anura

(iv) The œsophageal artery, unlike the condition in other Anura, is always *single* and arises from the left systemic arch. This condition has also been noted in *Bufo stomaticus*.

(v) In view of the total absence of the posterior mesenteric artery as such the term mesenteric artery is employed for the anterior mesenteric branch of the cœliaco-mesenteric trunk.

(vi) Lumbar arterias are absent in this toad, but may occasionally be present as an abnormality.

## References.

1. Bourne, G. C.,—1922.
   An Introduction to the Study of the Comparative Anatomy of Animals, Vol. 1 London, pp. 45-51
2. Crawshay, L. R.,—1906.
   On Variations in the Arterial System of certain species of the Anura. *Proc. Zool Soc*, London, pp. 1008–1033.
*3. Gaupp, E.,—1899.
   Anatomie des Frosches. Zweite Abteilung, pp.247–376.
4. Ghosh, E.,—1910.
   A Guide to Dissection of Vertebrates for Indian students. Calcutta, pp. 10-11.
5. Grobbelaar, C. S.,—1924.
   On the Venous and Arterial Systems of the Platanata (*Xenopus laevis* Daud). *S Afric. J. Science*, XXI, pp. 392–398.
6. Marriner, G.,—1906.
   Anatomy of *Hyla aurea*. *Trans. N. Zeal. Inst., Wellington*, XXXVIII, pp. 257-265.

* Includes all previous references, see pp. 540–546.

7. Marshall, A. M.,—1909
The Frog. An Introduction to Anatomy, Histology, and Embryology. London, pp. 29–36.

8. O'Donoghue, C. H.,—1917.
A Note on the Ductus Caroticus and Ductus Arteriosus and their distribution in the Reptilia. *Journ. Anat.*, London, LI, pp. 137–149.

9. O'Donoghue, C. H.,—1920.
An Introduction to Zoology for Medical students. London, pp. 60–63.

10. Parker, T. J., and Parker, W. N.,—1916.
An Elementary Course of Practical Zoology, 4th edition, pp. 78–103.

11. Rau, A. S.,—1924.
Observations on the anatomy of the heart, lungs, and related parts of *Ceratophrys*. *Journ. Anat.*, London, LVIII, pp. 306–327.

## Studies on Indian Ichneumonidæ

*The External Morphology of a Common Ichneumon-fly of India, Xanthopimpla pedator, Fabricious*

By A. C. SEN

(*Published with the permission of the Director, Zoological Survey of India.*)

### INTRODUCTION

The Ichneumonidæ constitute a very important group of the parasitic Hymenoptera They are widely distributed in India and are met with in the plains as well as in the hills. They vary considerably in size and colour, some being quite minute, others measuring as much as two inches in length. They are all parasitic and attack the eggs, pupæ, larvæ and even adult members of many orders of insects, as well as spiders, false-scorpions and centipedes. Their special prey are caterpillars, most of which are serious pests on crops, and hence the family is of great economic importance in an agricultural country such as India.

In spite of the great importance of this family, the biology of even its most common forms has not been studied in India. At the suggestion of Dr. H. S. Pruthi, Officer-in-Charge of the Entomological Section of the Zoological Survey of India, I undertook the study of the biology and life-history of this important family. As a preliminary to this study, I thoroughly examined the morphology of the common Ichneumon-fly, *Xanthopimpla pedator*, which is described in the present paper. Furthermore, with a few notable exceptions, no detailed studies have been made of Indian insects that may be used as Types by students of Zoology and Entomology in this country and the accounts available are all based on foreign species. It is, therefore, hoped that the present study will provide an account of an Indian type of the Hymenoptera, especially Ichneumonidæ.

### MATERIAL AND METHODS

The specimens, on which this study is based, were all collected in the Darjeeling District in May and June of 1912, and were in the collection of the Indian Museum. A specimen was first put in 10% KOH solution for about 24 hours, washed in distilled water to which a few drops of Acetic Acid had been added, then passed through the various grades of alcohol and

finally cleared in Cedar Wood Oil. Before mounting the preparation in Balsam, all traces of oil were removed by putting it in Xylol for a few minutes All diagrams have been drawn with the Camera Lucida

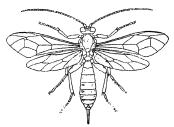
The terminology followed in this paper is the same as that employed by Snodgrass in his work on the "Anatomy and Physiology of the Honey-Bee" (1925)

I take this opportunity of expressing my gratitude to Dr. H. S. Pruthi who supervised my work and always helped me by giving advice and by affording me facilities for carrying on my investigation. My thanks are also due to Lt.-Col. R. B. Seymour Sewell, I.M.S., Director, Zoological Survey of India, for allowing me to work in the laboratories of the Zoological Survey of India, and for kindly going through the manuscript and making necessary suggestions

## General Morphology of the Ichneumonidæ

The body colouration of the Ichneumonids is mainly of the warning type, such as black, yellow or reddish-yellow, and the two sexes are often similar to each other The different parts of the body, the head, thorax and abdomen, are quite distinct from one another As in all other Hymenopterous insects the members of this family have two pairs of membranous wings, which are similar to each other in texture, and have veins very much reduced in number · the hind-wings are smaller than the fore-wings The costal margin of the hind-wings bears a series of hooks or hamuli the function of which is to grasp a ridge-like thickening along the inner margin of the fore-wings The mouth-parts are modified for chewing and sucking purposes, a condition met with only in certain specialised members of Hymenoptera. The intermediate region of the body does not consist of thorax alone but also includes the first segment of the abdomen. This transferred segment is known as the propodeum. The thorax proper possesses two pairs of spiracles, but the presence of three pairs of spiracles in the Hymenoptera indicates the inclusion of the first abdominal segment with its spiracles in the thoracic region The abdomen is connected to the thorax by the narrow basal half of its first segment, termed the petiole The apparent first abdominal segment is really the second segment.

The special features by which the parasitic Hymenoptera can be distinguished from the rest of the Hymenoptera are that the second joint of the leg, namely, the trochanter, always consists of two joints, and in the Ichneumonidæ only a second recurrent nervure is present in the fore-wing. These characters will be more fully explained in the detailed descriptions of the parts given later.

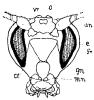
In the Ichneumon-flies the head is prominent and tapers towards the mouth, the eyes are large and occupy the greater portion of the head, the ocelli are three in number and are always present. The antennæ are situated between the eyes, are setaceous and many jointed, the number of joints varying from fourteen to seventy. Unlike those in the allied family Evanidæ the antennæ in the Ichneumon-flies are never elbowed. In some forms, a short neck is present. The thorax is broader than the other parts of the body and is well built and its three components, pro-, meso-, and meta-thorax. can be made out easily. Although the propodeum consists of the fused meta-thorax and the first segment of the abdomen, yet

Text-Fig. 1, Dorsal view of the Ichneumon fly, *X. pedator*, ♀, × 2·7.

many authorities designate the whole structure as the meta-thorax. There are eight dorsal and ventral segments visible in the abdomen of the male, but in the female the number of ventral segments is reduced to six. The abdominal segments are smooth and have distinctive marks on the dorsal surface. The ovipositor is often long and is sometimes longer than the abdomen itself. It is strong and sharp, and its prick and the poison that is ejected through it from the poison gland at the base, paralyses the prey and thus the fly safely deposits her eggs on its back or inside its body, and the young larvæ that emerge from these eggs live by feeding on the juices of the paralysed host.

MORPHOLOGY OF XANTHOPIMPLA PEDATOR

(*a*) The head and its appendages.

The head (fig. 1A.) is large and forms the most conspicuous part of the body. It is pale yellow in colour and appears almost triangular in shape when viewed from front. The dorsal side of the head is convex, its base is somewhat concave so as to fit on the thorax. As in most adult insects the segments comprising the head cannot be distinguished, but the following regions of the head can be made out, beginning from the base and proceeding towards the anterior.

The base of the head, known as the occiput (*oc.*), is concave and curves downwards at the sides to meet the post-genæ from which it is not separated by any suture. The occiput

Text-Fig. 1A. Anterior view of head of a male specimen ×9
*an* = antenna; *cl* = clypeus, *e* = eye; *fr* = front; *gn* = genæ; *mn* = mandible; *o* = ocelli; *vr* = vertex.

is black throughout. The next region is the vertex (*vr.*) which forms the dorsal side of the head capsule and which bears the ocelli (*o.*). It is short and convex.

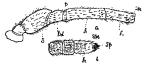
The vertex is followed by the front (*fr.*) which constitute the upper one-third of the face. It is very large and deep yellow. It is almost trapezoid in shape. It bears the antennæ and is bounded laterally by the large compound eyes (*e.*).

The next region is the clypeus (*cl.*) which is almost triangular in shape. It is a distinct sclerite, being separated from the neighbouring parts by well-defined sutures.

The sides of the head, the genæ (*gn.*), are large, extending from the clypeus and labrum to the lateral margins of the head. Posteriorly they are continued as the post-genæ, there being no line of demarcation between the two. The terms, genæ

and post-genæ, are applied to the different regions, anterior and posterior, of the same sclerite.

The compound eyes (fig. 1. *e.*) are very large, occupying the lateral sides of the head. They are not round as is the case in most insects but are crescentic in shape. Their colour is flavous, with the margins black. The three ocelli (*o.*) are black and are very conspicuous; they are arranged in the form of a triangle on the dorsal region or the vertex.

The antennæ (fig. 2.) are very important organs as they afford reliable characters of classificatory importance. They originate from the upper side of the head, a little below the median ocellus and are a little shorter than the length of the body. They are many jointed, there being 37 joints in the male and 48 in the female. They are very thin, with the apical joints slightly enlarged. An antenna when observed under a

Text-Fig. 2. Antenna of a male. × 18.

(*a*) basal portion; (*b*) apical portion. $f_1$ = first flagellum; $f_2$ = second flagellum; $f_l$ = last flagellum; *p* = pit at the base of the first flagellar joint showing the presence of Johnston's organ, *pd* = pedicle: *s.* = scape; *s pl* = sense-plates; *s.p* = sense-pegs.

microscope is found to be covered on almost all sides with numerous fine hairs. The hairs are unbranched and can be divided into two categories, namely, short and long varieties. The antenna is fuscous except on the under surface of the first joint which is brownish. The first antennal joint is called the scape (*s.*), the second the pedicle (*pd.*), and the following joints are known as the flagellar joints or clavola (Comstock). Some authorities call the joint next the pedicle as the annellus. The scape is the thickest of all the joints. At its base there are two smaller segments, the proximal one of which is almost cylindrical. The joints that follow the pedicle gradually decrease in size. The scape possesses only the longer variety of hairs, whereas the other joints have both the long and short varieties, the long kind being confined to the sides. At the base of the first flagellar joint is seen the "organ of Johnston", which is indicated externally by a circle of pits (*p.*). From the

first flagellar joint onwards, the antenna is covered, in addition to the ordinary hairs, with sense-plates (*s.pl.*), recurved and sensory hairs. The sense-pegs (*s.p.*) are restricted to the apical segment (fig. 2, b).

The sense-plates and sense-pegs are nothing but modified hairs The sense-plates though so different in shape are exactly similar in their internal structure to the ordinary hairs. These sense-plates are absent on the scape and pedicle but are present on all the flagellar joints.

The senso-pegs are thick and blunt and as already stated are confined to the extremity of the apical joint. These lack the terminal cap described by Vogel (1923), in the corresponding organs of wasps. The number of sense-pegs varies in different genera in the Ichneumonidæ. In *Xanthopimpla* there are ten senso-pegs arranged in a curved row at the tip of the antenna in both sexes. In the genus *Pseudeugalta* the number is reduced to eight

Snodgrass (1925) also found similar structures on the antennæ of the bee, although their positions and number vary from those present on the antennæ in the Ichneumonidæ. In the bee, according to Snodgrass sense-plates are found after the third flagellar joint and sense-pegs are met with after the fourth flagellar joint, and more abundantly on the end of the eleventh joint. Snodgrass does not mention the actual number of the sense-pegs present on the individual joints

The sense-plates and sense-pegs are both sensory organs as shown by Mc Indoo (1916) and Snodgrass (*op. cit.*) in the case of bees.

The ordinary hairs are also differently distributed in bees and wasps, in which the large variety is restricted to the scape only and the small variety to all other joints.

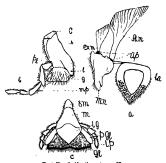
Excepting bees and wasps, practically no detailed work on the structures of the antenna has been carried out in any group of the Hymenoptera. Probably a careful examination will reveal the existence of similar structures in other forms as well as in *X. pedator*, *X. punctata* and certain other members of the family Ichneumonidæ, e.g., *Pseudeugalta*, in all of which I have been able to detect them.

The Mouth-Parts. (fig. 3, *a*, *b*, *c*.).

The mouth-parts differ greatly in different groups of insects according to their modes of life. In the Ichneumonids the mouth-parts are adapted for both chewing and sucking. The various parts are quite distinct and prominent and consist of an upper lip, the labrum (*la.*), an under lip, the labium, and two pairs of jaws acting horizontally between them, a superior pair, the maxillæ, and an inferior pair, the mandibles (*mn.*). The maxillæ and the labium are furnished with a pair feelers called the maxillary palpi and labial palpi respectively.

The labrum (fig. 3*a*, *la.*) or the upper lip, lies anterior to

the clypeal region. It is a broad, free, flat, and triangular flap lying above the opening of the mouth. It is freely movable. It is not long enough to cover the mouth-parts. It forms the roof of the anterior most part of the mouth and has a central, raised, triangular area. On the apical side of it some granules are seen.

The mandibles (fig. 3*a*, *mn.*) or the jaws, are strong organs, closing behind the labrum and hinged to the lateral parts of the

Text-Fig. 3, Mouth-parts. ×23.

*a*, labrum and mandible; *b*, maxilla; *c*, labium.

*ap* = apodemes; *c* = cardo; *ex. m* = extensor muscle; *fl. m* = flexor muscle; *g* = galea; *gl* = glossae; *l* = lacinia; *la* = labrum; *lg* = ligula; *l. p* = labial palpus; *m* = mentum; *mn* = mandible; *mp* = maxillary palpus; *p. gl* = paraglossae; *pl* = palpifer; *s* = stipes; *sm* = submentum.

head, below the genæ. In the Ichneumonids and in most other insects these consist of only one segment although in certain members of the family Scarabæidæ (Coleoptera) they consist of several distinct sclerites.

The mandibles are highly chitinised and triangular in shape. They are broad and thick in the proximal region and narrow abruptly in the distal region. Their apices are

bidentate; both teeth are black, hard, and pointed, the outer one being slightly longer than the inner one. The mandibles are firmly attached to the head capsule by two muscles and are thus able to move in a transverse axis. On the two extremes of the base of the mandibles are seen two knobs by which the mandibles are suspended from the genæ. The two muscles, referred to above, are known as the "extensor muscle" (*ex.m.*) and the "flexor muscle" (*fl m*): the former pulls the outer edge of the base, thereby opening it, and the other one pulls on the inner edge, thereby closing it. The flexor muscle is stronger since most of the hard work of the mandible falls on it. Both muscles consist of flat fan-shaped bunches of fibres, diverging from the chitinous stalks, the apodemes (*ap*), at their bases. The distal ends of the fibres are attached to the walls of the head The mandibles are sparsely covered with minute hairs which are visible only under a powerful lens Each mandible is connected with the labrum by a thin chitinous rod near the base as shown in the diagram

The first maxillæ (fig 3*b*) are the second or superior pair of the jaws They hang on the sides of the mandibles Each maxilla is primarily divided into five distinct sclerites, namely, the cardo (*c.*), the stipes (*s.*), the palpifer (*pl*), the galea (*g*) and the lacinia (*l.*) The cardo is the basal piece, and is small and triangular it is upon this sclerite that all motions of the maxilla is dependent The stipes is the largest of all. It is oblong in shape and bears at its apical end the galea and the lacinia and on the outer corner of its distal end is inserted the palpus. The area at the base of the palpus is known as the palpifer, which, unlike that in many insects, is not distinctly marked off in the species under discussion. The galea slightly overlaps the lacinia, it is large, flat, and semicircular in shape and is fringed with smaller hairs The lacinia is small and narrow and is borne on the inner margin of the stipes. Its margin also is fringed with small hairs

Morley (1913) stated that the maxillæ are only three jointed in the larva. He did not mention the names of these three joints nor the number of joints found in the adults.

The maxillary palpus (*mp.*) is five jointed and is covered with fine hairs. The different joints are not of the same size and shape. the basal piece is stout and strong, the second and third sub-equal, wider distally than at the proximal end, the fourth little more than half the length of the second and the fifth slightly longer than the fourth and rounded distally.

The labium.

In the embryo the second maxillæ fuse with each other so as to form a single organ called labium (fig. 3c). Like the maxillæ, the labium consists of several parts which are, however, smaller than the corresponding parts of the maxillæ and several

parts of the labium cannot be homologised with any degree of precision with components of the maxillæ. The basal sclerite of the labium, known as the submentum (*sm.*) is homologous to the cardines of the first maxillæ. The submentum is very small and narrow and is bounded laterally by the stipes of the first maxillæ The next one is the mentum (*m.*), which corresponds to the stipes of the first maxillæ. The mentum is wide, broad, and sub-triangular in shape, having the apical portion much wider. In the infero-lateral region near the lateral angles it bears two palpi, one on each side. The mentum is followed by a triangular sclerite, the ligula (*lg.*), which at its distal end bears a pair of lobes, namely, the glossæ (*gl.*) and the paraglossæ (*p.gl.*).

The two glossæ are fused into a median lobe as is met with in saw-fly, bee and many insects that feed on liquids. But the shape found in *X pedator* differs much from those found in bee and others. In *X. pedator* the united glossæ is flat and broad, as opposed to the pointed form in the bee and saw-fly. It is fringed with very short hairs at the terminal margin

The paraglossæ (*p gl.*) are present on the lateral sides of the ligula Each is elongated and lies closely by the sides of the median glossa. No hairs are present on it

In accordance with the feeding habits of the Ichneumonids, the maxillæ and the labium are closely associated with each other, and the fusion of the two glossæ to form a single median organ may be ascribed to the habits of licking liquid food

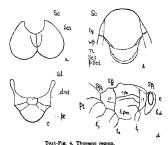
The labial palpi (*l.p.*) are much smaller than the maxillary palpi and are only four jointed Each labial palpus is fringed with very small hairs on the sides, and presumably, as in other insects, performs the function of a sensory organ

(*b*) The thorax and its appendages.

The thorax is the middle region of the body. This region bears the organs of locomotion such as the wings and legs It is divided principally into three parts, namely the pro-, the meso-, and the meta-thorax, which are firmly attached to one another. Each thoracic segment bears a pair of legs but the wings are developed only on the second and third segments. Besides these three segments, the first abdominal segment is incorporated in the thorax in all higher Hymenoptera. Therefore, strictly speaking, the thoracic region consists of four parts—the three thoracic segments and the first abdominal segment. This transfer of the first segment of the abdomen to the thorax takes place during the pupal stage as has been shown by Zander (1910) in the case of bees and by Emery and Janet in ants as quoted by Packard (1898). This transferred segment is known as the median segment or propodeum.

A typical thoracic segment consists of a dorsal part known as the tergum or notum, a ventral part, the sternum, and the lateral parts, the pleura. The tergum, especially in the

meso- and meta-thoracic segments, are usually differentiated into two pieces and sometimes into four. These are termed, beginning from the anterior to the posterior, pre-scutum, scutum, scutellum, and post-scutellum The scutum and scutellum are invariably large and well-defined, but the pre-scutum and post-scutellum are usually very small and not clearly discernible. The pleuron is also differentiated by means of a suture, the pleural suture, into two parts, the anterior of which

Text-Fig. 4. Thoracic region.

*a, b, c,* ×18, *d,* ×4.

*a*, pro-notum, *b*, meso-notum; *c*, meta-notum; *d*, anterior portion of the insect from the lateral aspect.

*al* = areolar area, *dnt* = dentiparal area; *e* = eye; *epm* = epimeron; *eps* = epi-sternum; *hd* = head; $l_1$, $l_2$, $l_3$, = first, second and third legs; *n* = notauli; *p.p.* = propleuron; *pt* = posterior area; *Pt* = petiole; *p. sct* = post-scutellum; *sc* = scutum, *sct* = scutellum; $sp_1$, $sp_2$, $sp_3$ = first, second and third spiracles; *tg* = tegula; *wp.* = wing-process.

is called the episternum and the posterior one, the epimeron. The sternum also is differentiated into an anterior part, the pre-sternum, and a posterior part, the post-sternum.

In *X. pedator* the thorax is stout and yellowish in colour and has characteristic black dots on the dorsal surface. There are four such dots on the meso-notum, three being arranged in a semicircular way on the pre-scutum, the fourth one lying posterior to these, just in front of the scutellum. There is also

a black spot on each of the lateral margins of the meta-notum, or the 'external area'. All these characters are important distinctive characters of the species.

### THE PRO-THORAX

The pro-thorax is short and extends almost to the bases of the fore-wings and bears the first pair of legs. Its dorsal surface is covered with very fine hairs. The pro-notum (fig. 4*a*) is narrow at the base and gradually widens in the posterior region. The anterior margin is very concave and the base of the head rests in this concavity. The posterior margin is convex but is deeply notched in the middle. The pronotum is on the whole differentiated into two parts only, the scutum (*sc.*) and the scutellum (*sct.*), of which the scutellum is much the larger. The pro-pleuron (fig. 4*d*, *p.p.*) is oblong and very small The pleural suture is not visible and therefore, the two parts of the pleuron are not distinguishable, as is the case in some other Hymenoptera, such as the bee and the wasp, etc. The pro-sternum is a triangular plate with its lateral margins partially covered by the lower margins of the pro-pleuræ. It is not differentiated into anterior and posterior parts, as is met with in most other Hymenopterous insects.

### THE MESO-THORAX

The meso-thorax is the largest of the thoracic segments. It is closely punctate and sparsely covered with fine hairs. It bears the second pair of the legs and the front pair of wings

The meso-notum (fig. 4*b*) is a large and highly-convex area. It is differentiated by two distinct transverse sutures into three parts, the scutum (*sc.*), the scutellum (*sct.*), and the post-scutellum (*p.sct.*); the first of these is by far the largest. In the postero-lateral regions of the scutum, there is a pair of indistinct ridges which are known as the notauli (*n.*). On the lateral margins of the scutum, just at the bases of the wings, there are certain sclerites which are known as the tegulæ (Kirby). These sclerites, as is well known, are found in the Lepidopterous and in some Hymenopterous insects only. The meso-scutellum is the highest region of the thorax. It is much shorter than the meso-scutum. The post-scutellum is very narrow and is not deeply buried under the scutellum as found in the bee (Snodgrass, *op. cit.*).

The meso-pleuron (fig. 4*d*) is much larger than the pro-pleuron. The pleural suture is distinct and is almost horizontal; the epimeron is larger than the episternum. Unlike that in the bee, the episternum is not subdivided into two parts, nor the pleural suture is twisted, but the epimeron is differentiated

into three parts by two fine transverse sutures, the lower one being very small.

The meso-sternum is oblong and slightly wider in the distal region It is incompletely divided into three parts by two short but distinct lines. "Sternauli", or a pair of ridges in the junction of the sternum and the pleuræ, fully developed in other genera are totally absent in *X. pedator*.

### The Meta-Thorax (*Fig.* 4*c*)

It is slightly shorter than the meso-thorax It should be noted in this connection that there is no sharp line of demarcation between the meta-thorax and the fourth segment of the thorax, namely, the propodeum, as is found in some other Hymenopterous insects Previous authorities on the Ichneumonidæ have used the term 'meta-thorax' to denote both the true meta-thorax and the fused first abdominal segment and this nomenclature is also retained here In fact, it is very difficult to say where the meta-thorax ends and the propodeum begins. The fusion of this first segment of the abdomen with the thorax is not complete in the saw-flies The meta-thorax bears the third pair of legs and the hind-pair of wings

The meta-notum is broader in the proximal region, it has two oblique ridges whose course is constant in a species. It is strongly carinate, the carinæ dividing it into several regions or areas. These are known, beginning from the proximal end, as the 'basal area' (which is wanting here), the areolar area (*al.*) and the posterior area (*pt.*). The areolar area is the central area and is quadrate in appearance The two areæ on the sides of the areola are known as the dentiparal areæ (*dnt.*) The posterior area is small and not differentiated into further regions as is the case in some other Ichneumonidæ

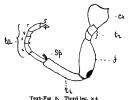
In striking contrast to these divisions of the meta-notum in the Ichneumonidæ, we find that in bees, wasps, and ants the meta-notum is entirely undifferentiated

As is found in the bee, the pleural suture here also is entirely wanting But strictly speaking it is very hard to say which region should be named the pleuron, as the true meta-thorax is very small and the propodeum is fused with it: and since this latter is an abdominal segment, it has only two parts—dorsal and ventral Therefore, the part that may be termed as the pleural region of the meta-thorax is really a part of the propodeum.

The meta-sternum is a very small plate and is void of any characteristic features.

There are three pairs of spiracles found on the thorax. Their exact position varies in different insects due to the result of adaptation to different modes of life. In beetles, which live in dusty places, the spiracles are concealed and occupy a

ventral position in the thorax, and on the abdomen these are placed near the dorsal edge under the elytra In the dragon-flies the first pair is more dorsally placed than the second and third pairs, the other pairs lie concealed in the membranous fold near the external plate. In Rhynchota these are more or less ventrally placed. In Hymenoptera these are also hidden but generally have dorso-lateral positions

In *X. pedator* the first pair of the spiracles are situated on the proximal region of the episternum, almost at its junction with the pro-pleuron (fig. 4*d*, *sp*.1). The second pair (*sp* 2) are in the upper region of the membranous fold between the second meso-pleuron and meta-pleuron. The third pair (*sp*.3) are the largest of the thoracic spiracles These are placed on the dorso-

Text-Fig 5. Third leg. × 4.
*cx* = coxa ; *f* = femur ; *sp* = spines , *ta* = tarsi , *ti* = tibiæ ; *tr* = trochanter.

lateral margins of the meta-thorax It is really the propodeum that bears this pair of spiracles and those are, therefore, the true first pair of abdominal spiracles.

## THE LEGS

The three pairs of legs are almost uniform in structure and shape. They are slender and long, and the surface is sparsely covered with minute hairs. When the thoracic segments are separated out, each is found to bear a groove, at the postero-ventral corner in the pleuron, in which the base of the leg rests. This groove, however, is not visible when the insect is seen as a whole.

The principal parts of a leg, as in all insects, are the coxa, trochanter, femur, tibia, and tarsus. Each leg in *X. pedator* has a black spot in the distal region of the trochanter and in

the same region of the femur but much larger; the base of the tibiæ, the tarsi, and the tarsal claws are all black.

The third pair of legs (fig. 5) are stoutest and largest. The coxa (*cx.*) can be easily distinguished as separate from the thorax, although this is not the case in bees, beetles, and many other insects, where it is more or less flattened in a vertical plane and is immovably attached to the sternum and is therefore apt to be mistaken for a part of the thorax. On the other hand in some insects the coxa is articulated by a ventral sclerite, 'the trochantin', which lies in front of it and hinges loosely on the lower edge of the episternum, but a trochantin is never found in the Hymenopterous insects and is supposed to be fused with the sternum.

The trochanter (*tr.*) is quadrangular in shape and is divided into two equal parts by a suture. The femur (*f.*) is the largest and stoutest of all the parts in the leg. The femur of the third leg is especially very much swollen.

The tibiæ (*ti.*) is a little thinner and longer than the femur with the distal end slightly thickened but there is no 'strigilis' or antenna cleaner, an organ which is very well developed in ants and bees It has two spines (*sp.*) at its distal end, near the base of the first joint of the tarsus.

The tarsus (*ta.*) is five jointed, having the two claws at the apical joint curved but not lobate or pectinate as are usually found in other species of the Ichneumonidæ. Each tarsal joint is quite distinct, the first joint being the largest of all.

## The Wings

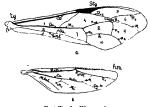
The wings (fig. 6, *a*, *b*) are hyaline and triangular in shape. They are uniformly pale yellowish. The fore-wings (fig. 6*a*) are longer than the hind ones and both are held close together by the hamuli, present on the hind wings described above.

The margins of the wings are known by different names, the anterior margin is called the costal, the distal one, the apical, the posterior one, the anal, and the proximal portion is known as the base of the wing. The base of the wing is generally known as the 'radix'. The sclerites present on the meso-thorax covering the base of the fore-wings are denoted by the term 'tegulæ' (*tg.*). In the middle of the costal margin of the fore-wing there is a corneous mass known as the stigma (*stg.*). It is a strong muscle which assists in folding the wing.

The radices are flavous, the tegulæ are black in the proximal portion and flavous distally. The stigma is triangular and broad and is of dark-brown colour.

The typical insect wing, as is well known, has several long veins which are termed as (beginning from the costal margin and ending at the anal margin), Costa, Subcosta, Radial, Median,

Cubital, and Anal (Comstock). The areas bounded by the wing-veins are known as 'cells'.

Different authorities do not agree in the application of this system of naming to the veins in Hymenopterous insects. Many have adopted different nomenclatures in which the veins are designated by individual names regardless of homologies with the veins in other orders. In the description of the wing-venations in the Ichneumonidæ we find that the descriptions and nomenclatures given by Morley (1913) do not agree to that given by

Text-Fig. 6. Wings, ×3.

*a*, the fore-wing; *b*, the hind-wing;
*anl* = anal vein; *co* = costa, sub-costa, median and radial veins all coalesced together; *cu* = cubital vein; *hm* = hamuli; $M_{1, 2, 3, 4}$ = branches of the median vein, first, second etc.; $R_{1, 2, 3, 4}$ = branches of the radial veins, first, second, etc.; *Rs* = radial sector; $Rs + M$ = radial sector and median vein coalesced together; $R + M$ = radius and median veins united; *stg* = stigma; *tg* = tegulæ.
Cells of the wings:— 1, 2, 3, basal; 4, 5, 6, cubital; 7, 8, 9, discoidal; 10, anal, 11, radial.

Comstock (1918.) I have here followed Comstock and also have given the corresponding names used by Morley.

The veins or nervures on the fore-wings are distinct and the cells are complete.

Near to the costal margin and running parallel to it is a prominent vein (fig. 6*a*, *co*.) which consists of the veins Costa, Subcosta, Radius, and Median, all fused into a single one. It passes through the basal portion of the stigma and meets the apical margin. From the middle of the stigma, the radial sector vein (*Rs*) is noticeable and gives two branches $R_3$ and $R_4$, the latter one being very small. The second prominent vein

emerging from the radix and running through the middle of the wing is the Cubital vein (*cu.*). It generally coalesces with the anal vein (*vide infra*). A branch of the Median vein passes through the cubital running between the stigma at the proximal end, and, the anal vein at the distal region. The median vein, as is usual, has four branches, of which the first one (*M*) meets the vein $R_4$ proximally and reaches the apical margin distally. The second one ($M_2$) at first running backward, *i.e.*, towards the posterior side of the wing, also meets the apical margin.

It is to be noted in this connection that the first portion of $M_2$ (that is, the portion which runs to the anterior side) is named by Morley (1909) as the 2nd recurrent vein. This name, "recurrent vein", is also used by most authorities on the Ichneumonidæ. This vein is a special characteristic found on the wings of the Ichneumonidæ only, and not present in the allied family Braconidæ which have much resemblance with the former family.

The vein $M_{(1+2)}$ is a short one, lying just the opposite of $M_1$. There is another vein known as the radio-median (*r-m.*) joining the radial sector on the dorsal region and meeting the $M_{(1+2)}$ ventrally. The area bounded by the veins (*r-m.*), $R_4$, $M_2$ and $M_{(1+2)}$ is known as the 'areolet'. This area is almost like a parallelogram and not triangular, as stated by Morley, (1913).

The vein $M_3$ runs towards the anal margin meeting the anal vein almost at the anal margin. This vein is denoted by Morley as the first recurrent vein. The vein $M_4$ lies between the Cubital and the vein $M_3$. The vein $cu_1$ is a very small one running between the cubital (*cu.*) and the anal vein (*anl.*). A small vein running parallel to the costal margin lies between $M_3$ and $M_2$ and is denoted by the name M. The anal vein (*anl.*) runs from the radix and meets the anal margin. It is quite prominent and long.

The cells have also been given different names according to the veins that bound them. For instance, the cell near the costal vein is called the costal ($c_1$), that near the cubital vein, the cubital cell ($c_2$), that adjoining the anal vein is denoted by the anal cell ($c_3$), and so forth

In the hind-wing, the venation is much reduced. The costa is, however, noticed as a separate vein for a short distance, then it coalesces with the compound vein or 'serial vein' (Comstock) R + M and meets the costal margin near the hamuli. The vein $R_s$ + M runs obliquely downwards from the costal margin and separates out after a short distance as the $R_s$ and M. This vein M is called by Morley as the second recurrent vein. The Cubital (*cu.*) passing from the radix, meets a branch of the Median and reaches the apical margin as the Cu-$M_1$. A short vein is seen, near the radix, joining the Cubital with the

R + M ; this occurrence appears to be unique, as it has not been previously reported by any worker on the Ichneumonidæ. It seems to me that the Median vein was at the very beginning connected with the Cubital vein and then passing up joined the compound vein of Costa and Radius, and this short branch is nothing but a remnant of the Median vein. The first anal (*Anl.*) vein does not reach the apical margin but ends a short distance from it. In its distal portion it receives a branch of the median vein ($M_3$) which meets the cubital on the costal side. This vein was named by Morley as the first recurrent vein. And this vein also meets another vein $M_2$, running almost parallel to the costal margin. Another small vein is also noticed under the 1st anal vein, this may be the 2nd anal vein.

The wing-cells on the hind-wing are not complete as those on the fore-wing. These are denoted by the same terminology as the previous ones.

### The Abdomen

The abdomen is the last or posterior part of the body and is connected with the thorax by a distinctly constricted stem, the petiole. It is broader at the base and gradually tapers in the distal region. Its colour is yellow. The abdomen in adult insects usually consists of ten segments, though all these segments are not always visible, a few being retracted at the posterior end. The abdominal segments have only dorsal or tergal plates and ventral or sternal plates. Each abdominal segment is connected with the preceding and following segment by a large and flexible intersegmental membrane, which allows the segments great freedom of motion. Each tergal plate overlaps the following one, while the sternal plates are underlapped by the succeeding ones. The terminal segment carries the anus, whereas the openings of the male and female reproductive organs are on the ventral surfaces of the ninth and eighth segments respectively.

In *X. pedator*, the male has eight visible tergites and sternites but the female has only eight tergites and six sternites.

The abdominal spiracles are situated on the lateral sides of the first eight tergal plates, counting the propodeum as the first segment of the abdomen. These are all minute, being much smaller than those on the thoracic region. The external openings are narrow slits, indistinctly visible in dry specimens.

At the terminal end of the abdominal segment in both sexes, is found a pair of appendages, the styli (fig. 7, *stl.*) They are small and are fringed with minute hairs. These are not at all segmented and have never been reported by previous workers on the Ichneumonidæ. In a few species of the allied genus *Pseudeugalta*, that I have had the opportunity to examine, these appendages were not found.

THE GENITALIA

The external appendages found near the genital openings in both sexes are known as the genitalia. The opinion as to their homologies is not yet unanimous. Unless the internal relations and the structures of the appendages are carefully investigated, one is apt to be led to false deductions. Hence, we find much difference of opinion among the workers on the genitalia in insects (*vide* Newell, 1918).

These appendages naturally differ in the two sexes and often their structure in one species is quite different from that in the allied species or genera and hence they are very commonly used in systematic work.

(*a*) Male (fig. 7).

The male genitalia consist of three pairs of appendages all borne by the ninth segment It must, however, be remembered that three pairs of genital appendages are not usually met with in all insects, often there are only two pairs (Pruthi, 1924).

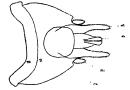
The three pairs of appendages in *X. pedator* lie one within the other, so at the most only two pairs are visible externally. Beginning from the outermost these are termed in all Hymenopterous insects as stipes (*st.*), sagitta (*sg.*), and spatha (*sp.*) respectively (Kluge, 1895), or 'Valve externa', 'Valve interna', and 'Penis' respectively (Zander, 1900). Works of Dewitz (1874–5), Vorhœff (1893), Kluge (1895), Zander (1900) and others, who have studied the development of these organs, show that in the young condition there are only two pairs of appendages, an outer and an inner pair; the former pair give rise to the stipes and the latter pair in some insect, *e.g.*, Apidæ, directly develop into the spatha or penis; while in the Vespidæ, Saw-flies, etc., it becomes two pairs during development and gives rise to both the sagitta and the penis of the adult. From these evidences the conclusion is drawn (Schmiedeknecht, 1882–4) that the penis in the former case is equivalent to both the sagitta and penis in the latter case.

In view of the nature of the development of these organs, Pruthi (1924) compared them with the 'subgenital-plates', 'parameres', and 'aedeagus' of Homoptera and other insects.

The outermost pair, or the stipes, are the largest of the appendages and are covered all over with minute hairs. Each stipes is a triangular plate, broader at the base and tapering in the distal region. The second pair, or the sagitta, are the smallest appendages and are hidden under the stipes. Each sagitta is almost oval in shape and is devoid of hairs, etc. The innermost pair, the penis or spatha (*sp.*), is moderately long. The components of this pair are almost fused with each other and form a tubular organ, carrying the gonopore at the apex. This is the proper copulatory organ.

There is a ring-like sclerite between the bases of the genitalia and the ninth sternum. This structure is called the cardo (*ca*). It is nothing but a part of the ninth sternum (André, 1881–96). Verhoeff, (1893), however, homologised it with the basal plate of Coleoptera. As pointed out by Pruthi, the basal plate of the Coleoptera is at an entirely different place than that occupied by the cardo in Hymenoptera. It appears, therefore, that André (*op. cit.*) was correct in considering this sclerite as a part of the ninth sternum.

(*b*) Female (fig. 7).

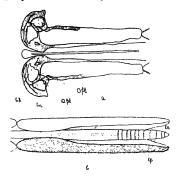
The Ichneumonidæ lay their eggs on the surface or inside the body cavity of caterpillars which they paralyse by stinging. Owing to this habit the ovipositor is sharp, strong, and long. The ovipositor always remains protruded beyond the posterior

Text Fig. 7. Male genitalia, X 18.
*ca* = cardo ; *ps* = spatha ; *st* = stipes , *stl* = styli ;
VIII, IX = eighth and ninth abdominal segments.

extremity of the abdomen. In the bee and the wasp, as is well known, the ovipositor, or the sting, is situated in a specially modified place known as the sting-chamber from which it can be thrust-out at will, when occasion demands.

The ovipositor in *X. pedator* is about one-third the length of the abdomen.

The components of the ovipositor can be clearly distinguished ; they are not so much complicated as those of the male genitalia. Here also they consist of three pairs of appendages, the anterior, posterior, and lateral ovipositor lobes ; or, the ventral, inner, and dorsal valvulae respectively (Walker, 1919 ; 1922). These three pairs are generally known as the lancet (*ln.*), sheath and the lancet-palpi (*lp.*) respectively (Zander, Snodgrass, etc.). These appendages lie close to each other.

The first or the anterior lobes, are borne by the eighth sternum near its posterior margin; the other two pairs, namely, the posterior and the lateral lobes are borne by the ninth sternum.

In some insects, the three pairs of appendages comprising the ovipositor remain distinct and separate from one another, as

Text Fig. 8, Female genitalia, × 9.
*a*, inner portion, *b*, outer portion;
*b.s* = bulb of the sheath; *ln* = lancet; *lp* = lancet palpus;
*o. pl* = oblong plate; *q. pl* = quadrate plate.

is the case, for example, in the common grasshopper. The homologies of the appendages of the Ichneumonidæ and the Grasshopper may be stated thus: the lancets or the anterior lobes are homologous to the ventral valvulæ, since both are the appendages of the eigth segment; the sheath or the posterior lobes is equivalent to the inner valvulæ and the palpi or the lateral lobes represent the dorsal valvulæ or the outer gonapophyses of the ninth segment.

The lancets (or the anterior ovipositor lobes) are long and sharp. It is with this pair of appendages that the insect

pierces the body of the victim and deposits her eggs therein. Each component of the lancet is attached at its base to the triangular plate by two arms which curve outwards. On the ventral side of the lancet a canal or deep groove runs throughout its length. It is through this canal that the eggs are said to pass out. The lancet is ringed in the distal region and, unlike that in bees and wasps, has no barbs at the apex.

The second pair of the ovipositor lobes, or the sheath, are situated very close to the lancet and cannot be separated or even distinguished from the lancet in the dry specimens. These are the shortest of all the appendages of the female genitalia. The base of the sheath is also prolonged at the sides forming what are known as the arms of the sheath, which are borne by the oblong plate, as stated before. The third pair of the ovipositor lobes, or, the lancet palpi, are long and wide. The lancet-palpus lies on the sides of the lancet. Their extremeties which project beyond the abdomen are fringed with minute hairs. The lancet-palpi protect the lancet from external injuries and shocks. These may also act as sensitive organs, as the case in the bee, where they enable her to know when the abdomen is in contact with a suitable prey on which she may use the sting The lancet-palpi in *X. pedator* are like elongated rods, uniform in appearance throughout the length, thus resembling those in the grasshopper.

At the base of the ovipositor there are three chitinous plates which are believed to keep the ovipositor in an elongated position. These plates are known respectively as the quadrate plates (*q. pl*), oblong plates (*o. pl*), and triangular plates. In *X. pedator* the triangular plates are hidden under the quadrate plates and, therefore, are not visible unless the latter plates are removed. The quadrate plate overlaps the distal half of the oblong plate, and covers the triangular plate. Zander (1911) has shown that the triangular plate is a part of the eighth sternum in the case of the bee, and this is believed to be the case in all Hymenopterous insects. The fact that it is connected with the lancet also supports the view that it is a part of the eighth segment to which the lancet belongs. As the quadrate plate is overlapped by the spiracle-plates of the eighth tergum, it may appear to belong to the eighth sternum, but, Zander, who studied its development in the bee, has showed that it is a part of the ninth tergum. In many adult Hymenoptera too, the quadrate plate is found to be a tergal piece (Snodgrass). It is almost oval in shape, resembling that of the bee. The oblong plate belongs to the ninth sternum. Its shape in *X. pedator* is strikingly different to that found in bees and wasps. Here it is much smaller and rod-like in appearanc. It is partly hidden under the quadrate plate where it is bifurcated. It is attached to both the sting palpus and the arm of the sheath.

REFERENCES


André, E. (1881-96) .. Species des Hymenopteres d'Eurpoe et d'Algerie.

Comstock, J H. (1918) .. The wings of Insects. Ithaca, New-York.

Dewitz, H. (1875) .. "Uber Bau und Entwicklung des Stachels und der Legescheide einiger Hymenopteren und der grunen Heuschrecke". *Zeit. f. wiss. Zool.*, XXIV, pp. 175–200.

Kluge, M H. E. (1895) .. "Das mannliche Geschlechtsorgane von Vespa germanica". *Arch fur Naturgesch.*, LXI, p. 159.

Mc Indoo, N. E. (1914) .. (1) "The olfactory sense of Hymenoptera". *Proc Acad. Nat. Sci. Philadelphia*, LXVI, pp 296–341

" (1914) .. (2) "The olfactory sense of the honey-bee". *Journ. Exp. Zool.*, XVI, pp. 265–346

" (1916) .. (3) Smithsonian Miscellaneous Collections, 65, No 14, pp. 1–55

Morley, Claude (1909) .. (1) "A description of the Superior Wing of the Hymenoptera. *Trans. Ent Soc Lond*, pp. 439–447.

" (1913) .. (2) The Fauna of British India, Hymenoptera, Vol. 3, Ichneumonidæ, Part 1.

Newell, A. G. (1918) .. "The comparative Morphology of the Genitalia of Insects". *Ann. Ent. Soc America*, XI, 2, pp. 109-142

Packard, A S. (1898) .. The Text-book of Entomology. London.

Pruthi, H. S (1924) .. "The development of the male genitalia of Homoptera, with preliminary remarks on the nature of these organs in other insects". *Quart. Journ. Micros. Sci.*, LXIX, Part 1, pp. 59-96.

Schmiedeknecht, H L. O (1882–84) .. Apidæ Europææ. Berlin.

Snodgrass, R. E. (1910) .. Anatomy of the Honey-Bee. U. S. Dept. Agr, *Bur. Ent, Tech. Ser. Bull* 18.

" (1925) . (2) Anatomy and Physiology of the Honey-Bee, New-York.

Vogel, R. (1923) .. "Zur Kenntnis des feineren Baues der Geruchsorgane der Wespen und Bienen". *Zeit. wiss. Zool.*, CXX. pp. 281-324.

Verhoeff, C. (1893) .. "Finden sich für de Laminæ basales der mannlichen Coleopteren Homologa bei Hymenopteren" *Zool. Anz.*, XVI, pp. 407-412.

Walker, E M. (1919) .. "The Terminal Abdominal Structures of the Orthopteroid Insects—Female". *Ann. Ent. Soc. America*, pp. 267–316.

" (1922) .. (2) "The Terminal Abdominal Structures of the Orthopteroid Insects—Male", *ibid.*, pp. 1–76.

Zander, E. (1900) .. (1) "Beiträge zur Morphologie der männlichen Geschlechtsanhange der Hymenopteren". *Zeit. f wiss. Zool.*, LXVII, No 3.

" (1910) .. (2) "Die Gliederung des thoracalen Hautskelettes der Bienen und Wespen". *Zeit. wiss. Zool.*, XCV, pp. 507–517.

" (1911) .. (3) "Der Bau der Biene", Stuttgart, pp. 182.

# New Species of Indian Plants

By E. BLATTER

The plants here described were gathered in the Bombay and Madras Presidencies and Mount Abu. All the descriptions have been prepared from live specimens.

## *Ranunculaceæ*

THALICTRUM OBOVATUM Blatter *sp. nov.* [*Ranunculacea similis Thalictro Dalzellii* Hook. *sed differt caulibus non sulcatis stipulis fimbriatis, sepalis late obovatis unguiculatis quam stamina paullum brevioribus, filamentis applanatis, ovariis distincte stipitatis, compressis* ]

An erect herb. Roots fibrous. Stem up to 45 cm. high, slightly flattened on one side, not grooved, light-coloured, glabrous. Leaves trifoliolate except the topmost which are 2-foliolate or 1-foliolate, very slightly sheathing at the base; leaflets about 3 cm. diam., glabrous, almost round or kidney-shaped, with a deep acute sinus, margins crenately and irregularly lobed and dentate; nerves and veins prominent above and beneath; petioles of lower leaves 6 cm. long, on the upper side slightly or deeply or not at all grooved in the same plant, sometimes grooved only in the lower part, glabrous; petiolules up to 3 cm. long. Stipules adnate to the petiole and united on back opposite the leaf or only adnate to petiole, up to 1 cm. long, oblong-acute, broad to narrow, fimbriate, membranous, strongly nerved. Flowers 8·9 mm. diam., in small leafy panicles crowded at the ends of the branches, delicately sweet-scented; leaves of panicles ovate-acute or blunt with very small stipules which don't unite opposite the leaves. Sepals usually 4, sometimes 5, white, broadly obovate, clawed, strongly nerved, 4·5 mm. long, 3 mm. broad, slightly shorter than the stamens. Petals O. Stamens many; filaments flat, tapering towards base, twice as long as anthers; anthers basifixed, club-shaped. Ovary on a stalk 2.5 mm. long, broadly oblong, dark green, compressed, with a long neck almost as long as the ovule-bearing part, neck deeply furrowed on dorsal side, light green, almost transparent, curved outward at tip like a beak (not hooked) with stigmatic surface on ventral surface. Ovule oblong-obovate. Fruit not ripe.

*Locality.*—Bombay Presidency: Aukali, half-way between Panchgani and Mahableshwar, about 4,100 ft. altitude, on edge

of Yenna valley in very exposed position, apparently very rare (Blatter P26 type).—Flowered 12th July, 1925.

*Note.*—I have not been able to place this species in any of the 3 sections given by DeCandolle. Resembling *T. Dalzelli* in most characters it should belong to *Euthalictrum* DC, but the compressed achenes exclude it from that section. The leaves, again, remove it from *Physocarpum* DC Future monographers of *Thalictrum* may have to make a change in the division of the genus.

*Capparidaceæ*

CLEOME ASPERRIMA Blatter *sp. nov.* [*Capparidacea, similis Cleomi simplicifoliæ* Hook. f. and Thoms., *differt tamen forma sepalorum necnon petalorum, petalis strigosis, pedicellis totis hispidis, numero staminum, filamentis apice minime incrassatis.*]

Annual, up to 30 cm. high, erect or slightly ascending. Stem rigid, furrowed, slightly branched, densely covered with short rigid spinulose hairs arising from stout glandular bases on the ridges as well as in the furrows, leafy all along. Lower leaves 3-4 cm. by 1 cm., lanceolate-acuminate, acute at base with midrib above depressed and prominent below, strigose on both surfaces, with longer and stronger spinulose whitish bulbous-based hairs on the midrib, petiole 2–3 mm. long; upper leaves from about the middle of the stem narrowly linear-lanceolate-acuminate, sessile or subsessile, about 3 cm. by 3–5 mm., otherwise like the lower. Flowers purple, solitary in the axils of leafy bracts, forming a long lax raceme for the two upper thirds of the stem. Pedicels filiform, about 2 cm. long, uniformly thick, erect or slightly ascending in flower, horizontal or depressed in fruit, spinulose-hairy the whole length, but more so immediately below the flower. Stamens 8–15; filaments uniformly thick throughout. Sepals 4, narrowly triangular-acuminate, a little more than ½ the length of the petals, densely pilose on back and margin. Petals 4, 5 mm. long, oblanceolate or spathulate, rounded at apex and provided with a prominent mucro, median line of back strigose and sometimes also the margin. Capsule up to 22 mm. long, including the beak 2–3 mm. long, green, subtorulose, about 2–3 mm. diam., straight, striate, slightly flat, glabrous; seeds round-kidney-shaped, greyish, 2 mm. diam., smooth. No gynophore.

*Locality*—Dhulia, W. Khandesh of the Bombay Presidency, collected by Mrs. Helene Hedberg. (No. 7670, type.)—Flowered and fruited at the beginning of November, 1928.

*Note.*—If the figure of the seed of *Polanisia buetporensis* Munro (Wight Ic. t. 1072), a synonym of *Cleome simplicifolia*, is correct, we can point out another good difference between *C. simplicifolia* and the new species. In the latter the seed forms a completely closed ring, whilst Wight's figure shows an open ring.

*Caryophyllaceæ*

SPERGULA ROSEA Blatter sp. nov. [*Caryophyllacea. Folia opposita, subulata, longe hirsuta versus apicem Stipulæ setaceæ. Sepala 5, ovato-lanceolata, acuta, paullum inæqualia Flores in cymis paniculatis pedunculatis. Petala rosea, spathulata vel anguste oblanceolata, obtusa, basi longe unguiculata, sepalis multo longiora. Stamina 5, cum petalis alternantia; filamenta petalis æquilonga. Styli 5, lineares; stigma minutissimum. Capsula 1-locularis. Semina ovoideo-globosa vel pyriformia, formose reticulata secundum lineas horizontales, nigro-cinerascentia.*]

A small herb. Leaves opposite, subulate, stipulate, long-hairy towards tip. Stipules long-setaceous. Sepals 5, ovate-lanceolate, acute, slightly unequal Flowers in peduncled panicled cymes Petals 5, pink, long-clawed, spathulate or narrowly oblanceolate, obtuse, longer than the sepals. Stamens 5, alternating with the petals; filaments as long as the petals. Styles 5, linear; stigmas minute. Capsule 1-celled. Seeds ovoid-globose to pyriform, beautifully reticulated in horizontal rows, black, with a greyish hue.

*Locality* —Bombay Presidency: Igatpuri, in grass-land near lake (Hallberg No. 19799, type, in formalin, St. Xavier's College, Bombay).—Flowered and fruited in October, 1917.

*Papilionaceæ*

INDIGOFERA MONOSPERMA Blatter sp. nov. [*Pertinet ad sectionem Sphæridiophoræ. Herba nana procumbens ramosa Caules ramique hirsuti pilis medifixis. Folia pinnatim 3-foliolata exstipellata; foliola integra, obovata, obtusa, hirsuta, facie inferiore glandulis obsita viridibus; foliolum terminale 16 × 9 mm., lateralia 10 × 8 mm., rhachis petiolusque hirsuta. Stipulæ minutæ, subulatæ, hirsutæ. Stipellæ O. Racemi densi, breves, axillares pedicellis brevissimis. Calyx minutus, 5-lobus lobis fere æqualibus subulatis, hirsutissimis. Petala sub-æquilonga; vexillum ovatum, obscure mucronatum, 3·5 × 2 mm., brevissime unguiculatum, roseum intus, extus flavescens et hirsutum; alæ oblique spathulatæ, obtusæ, integræ vel apice minutim serrulatæ, glabræ, rubræ; petala carinæ parte media connata, recta, virescentia hirsuta excepta parva parte purpurascenti calcaribus vicina; calcaria parva, acuta, alba. Stamina diadelpha antheris uniformibus apiculatis. Ovarium 1-ovulatum, pubescens, stylo filiformi, glabro, stigmate capitato. Legumen parvum, ovoideum, acutum, 2·5 mm. longum, indehiscens; semen 1, parvum, aliquomodo compressum, glabrum.*]

A small procumbent herb, about 7 cm. high, branched from creeping part. Stem and branches terete, with numerous appressed medifixed hairs, tips of hairs curved upwards; hairs of younger parts longer, fixed along their lower part, pointing

upwards. Leaves pinnately 3-foliolate, exstipellate; leaflets entire, obovate, obtuse, hairy on both surfaces with hairs chiefly more or less basifixed, dotted with green glands beneath, dots turning black when old; terminal leaflet 16 by 9 mm., lateral 10 by 8 mm.; rhachis 2·5 mm. long, hairy; petiole flat above, hairy. Stipules minute, subulate, hairy. Flowers in dense, short, axillary racemes; pedicels very short, up to 1 mm.; peduncle and pedicels hairy. Calyx minute, 5-lobed, lobes about equal, subulate, very hairy, hairs basifixed. Petals about equal in length; standard ovate, obscurely mucronate, 3·5 by 2 mm., with a very short claw, pink inside, yellowish and hairy outside; wings obliquely spathulate, obtuse, entire or tip minutely serrulate, glabrous, red; keel-petals connate with their middle portion, tip and base free, straight; spur small, acute, white, portion in front of spur glabrous or nearly so, purplish, rest of keel-petal greenish, densely hairy outside with a few dark dots. Stamens diadelphous; anthers uniform, apiculate; pollen dark yellow. Ovary 1-ovuled, pubescent; style filiform, glabrous; stigma capitate, yellow. Pod small, ovoid, acute, tip bent down, style persistent, 2 prominent ridges on top far apart, ending about ⅓ down the pod from tip; length 2 5 mm.; walls very thick; pod obviously indehiscent. Seed 1. small, somewhat compressed, glabrous.

*Locality*.—Bombay Island: Matunga (Hallberg No. 1212, type).—Flowered and fruited in November, 1916.

SMITHIA OLIGANTHA Blatter *sp. nov.* [*Papilionacea accedens ad Smithiam salsugineam* Hance *a qua tamen distingui potest foliis pubescentibus, stipulis triangularibus mucronatis sine auriculis, bracteis non ovato-lanceolatis, bracteolis minoribus apice obtusis, floribus paucis, calycis florentis labio superiore suborbiculari, corolla alba, fructus calyce subgloboso, seminibus punctatis.*]

A small, erect herb, about 6 cm. high, branched Stem and branches purplish, glabrous except for a few long spreading stiff hairs. Leaves abruptly pinnate; leaflets 2 pairs, 6.5 by 3.5 mm., first pair obovate, second obliquely obovate, tip rounded, downy on lower surface, margin bristly as is also the single nerve beneath, otherwise glabrous; rhachis 1.5 mm., ending in an acute tip 1 mm. long. Petiole 2 mm. long with 2 or 3 hairs similiar to those on the stem, purplish. Stipules 2 by 1 mm., triangular, mucronate, membranous, purplish. Bracts similar to stipules but somewhat smaller. Bracteoles 2, immediately below calyx, elliptic-oblong, 2 by 1 mm., membranous, entire, obtuse, glabrous, veined, with a purplish hue. Flowers solitary or 2 together (only 1 specimen with 3 flowers). Calyx in flower: Lower lip 6 by 4 mm., ovate, acute, entire, fringed with hairs along margin, a long bristle on midrib, folded; upper lip suborbicular, 4 mm. long, hairs like those of lower lip; veins distinctly

anastomosing, texture membranous. Calyx in fruit much enlarged, turgid, almost globose, 9 mm. long, 6 mm. diam. Corolla white, turning yellowish; lobes about equal; standard 9 by 4.5 mm, clawed, with a few long hairs along midrib on back wings obliquely oblong, clawed; keel-petals connate only near their apex at the broadest part, with a short spur 1.5 mm. from the base. Stamens in 2 bundles of 5 each; filaments expanding downwards into a sheath. Ovary linear, slightly twisted, glabrous; style filiform, glabrous. Pod shortly stalked; joints of pod in the single specimen examined 10, (undeveloped ovules 4), thin, suborbicular, 4 mm. diam, not rugose nor reticulately venose, punctate, shaped like a dinner plate.

*Locality*.—Bombay Harbour: Uran, moist ground in water-course near village (Hallberg No. 14567, type).—Flowered and fruited in January 1917.

*Rubiaceæ*

OLDENLANDIA CLAUSA Blatter *sp. nov.* [*Rubiacea, pertinens ad Oldenlandiae sectionem Kohautiam. Herba nana non-ramosa, quadrangularis Caulis angulis pilis recurvis instructi. Folia decussata, lineari-lanceolata, scabra supra et in nervis infra, marginibus breviter spinosis. Stipulae membranaceae crateriformes, interpetiolares pluribus munitæ setis. Flores pauci axillares sub anthesi clausi. Calycis segmenta 4, setacea. Corollae tubus longus, lobi 4, valvati, concavi, valde carnosi. Stamina 4, inclusa; filamenta brevia, crassa; antheræ dorsifixæ, purpureæ. Stylus filiformis, stigmata 2, permagna, recurva. Fructus 4 mm. longus (sine calycis dentibus), aliquantulum trigonus, hirsutus speciatim in parte superiore; calycis dentes distantes.*]

A small herb, about 3 cm. high. Stem woody and ascending below, then erect, quadrangular, not branched, with recurved hairs on the corners; internodes very short. Leaves decussate, sessile, narrowing to the base, crowded, 2.7 cm. long, 5 mm. broad, linear-lanceolate, scabrous-hairy above and on the nerves below, margined with short spine-like hairs pointing outwards, nerves on lower side distinct. Stipules broad, cup-like, membranous, interpetiolar, hairy, with several (about 4) long bristles which are glabrous. Flowers axillary, several in each axil, all of which develop. Calyx-teeth, 4, 1.5 mm. long, with upcurved stiff spinulose hairs. Corolla tubular, 5.5 mm. long, clavate, the top with a few erect straight spinulose hairs, 0.5 mm. long; tube slender; lobes 4, valvate, 1.25 mm. long, concave, very fleshy, especially the tip. All flowers observed, young and old ones were closed and did not open easily (self-pollination). Stamens 4, inserted just below the junction of two corolla-teeth; filaments short, stout; anthers 2-celled, dorsifixed, purple, reaching more than half way up the

corolla-teeth. Style filiform; stigmas 2, very large, recurved. Fruit (without teeth) 4 mm. long, slightly trigonous, 2-celled, hairy, especially in the upper part; calyx in fruit slightly enlarged, teeth distant.

*Locality.*—Rajputana; Mount Abu: Gora Chapra, on sandy ground (Hallberg and Blatter No. 15643).—Flowered and fruited in October 1917.

OLDENLANDIA SEDGWICKII Blatter *sp. nov.* [*Rubiaceæ. Pertinet ad sectionem Gonotheceæ Accedit ad O. paniculatam* Linn. *sed distinguitur foliis ad basim caulis brevissimi acervatis necnon pseudo-verticillatis ovatis, pedunculis e supremo foliorum veritcillo surgentibus, corollæ tubo minimo.*]

A small annual. Stem almost 0. Leaves crowded at the base of the stem, falsely whorled, ovate, 3.5 by 2.5 cm., obtuse, narrowed into the very short petiole, scabrid, hirsute. Peduncles many from the crown whorls, very slender, 10 cm. long, hirsute with short spreading hairs, laxly trichotomously branched; ultimate pedicels 12 mm long. Flowers small, white. Corolla-tube almost 0; lobes 4, narrow, stellately spreading, with many erect moniliform hairs in the throat. Stamens 4, erect; anthers opening by slits. Ovary 2-celled, many-seeded. Stigmas capitate. Capsule compressed, as broad as long, opening by transverse slit in crown; calyx teeth minute, distant, below the protruded top of the capsule. Seeds minute, rough.

*Locality.*—N. Kanara: Karwar, in wet place in evergreen above the sea (Sedgwick No. 6653. type).

*Note*: The new species may prove in course of time to be one of those which have been included by J. D. Hooker (*Fl. Brt. Ind.* III, 69) under *O. paniculata* Linn. More material and from different localities is required before we can settle the question.

*Acanthaceæ*

JUSTICIA HETEROCARPOIDES Blatter *sp nov.* [*Acanthaceæ tribus Justiciearum subtribus Eujusticiearum. Valde similis Justiciæ heterocarpæ* T. Anders *sectionis Calophanoidis, distinguitur tamen tota planta necnon foliis multo maioribus, petiolo juveni ciliato adulto pubescenti bracteis nullis, bracteolis duabus vel nullis, calycis segmentis valde glanduloso-hirsutis et margine scariosis et ciliatis, capsula clavata.*]

A straggling herb up to 1 m. high, stems and branches very slender, 6-angled, pubescent; internodes very long, reaching up to 10 cm. Leaves opposite, up to 6.5 by 2 cm., on both surfaces and margins shortly hairy, entire or subentire, obscurely waved, nerves prominent beneath; petiole 2.5 cm. long, with a narrow groove on the ventral side, ciliate when young, pubescent when old. Flowers sessile, clustered in the axils of the leaves. Bracts absent. Bracteoles 2 to each flower

or absent, minute, subulate, hairy. Calyx in flower 3 mm. long, in fruit 5 mm., divided nearly to the base; lobes 5, subulate, narrowly scarious-margined, very glandular-hairy and ciliate. Corolla 4.5 mm., tube about half the length of corolla, cylindric; upper lip half as long as the lower, not as broad as the midlobe of the lower, lower lip much the largest, spreading, 3-lobed, lobes rounded, midlobe largest, pink, with an angular purple spot at the base, both lips pubescent outside. Stamens 2, included; filaments glabrous; anthers 2-celled, cells spirally twisted, yellow, opening longitudinally, the smaller cell placed much higher than the larger, the lower cell spurred with a narrow, white appendage; pollen oblong-subglobose. Staminodes 0. Style filiform with a few long hairs in its lower part; stigma capitate, oblique. Fruits dimorphous; the normal one the ordinary capsular type of the family: 2-valved, 2-celled, clavate, pointed, 5 by 1.5 mm., splitting elastically from the pubescent tip, somewhat compressed, the surfaces with 2 shallow grooves in the form of a cross. Seeds 4, on short retinacula, 0 75 mm. long, obliquely cordate where it is attached, somewhat compressed, brown, covered with tubercles, the longest of which are collected in a row on one of the faces. The abnormal fruit is a nut, longitudinally compressed, apparently indehiscent, covered with 4 high and 2 slightly lower ridges divided like a cockscomb, divisions densely clothed with minute inturned-curved spines, the whole forming an ellipsoidal body somewhat stretched longitudinally, 4 mm. long. Seed 1, large, 1.5 mm. long, brown, attached near the base to the retinaculum, obliquely ovoid, very little obliquely compressed, cordate at the point where it is attached, low ridges running down the whole length of the seed, otherwise perfectly smooth.—Both kinds of fruit found in the same axil, both are of about equal frequency.

I am not sure whether this species is a good one. It certainly resembles *Justicia heterocarpa* very much I leave it to others to judge whether the points mentioned justify the making of a new species. Not having seen the type-specimen of *J. heterocarpa* I had to rely entirely on descriptions which in this family are not always quite reliable. It is not impossible that a comparison of the type-specimen of *J heterocarpa* with my description may reveal other differences between the two species. If, however, they should prove identical we shall be happy at the thought of having given a detailed description from a live specimen

*Locality.*—Mount Abu: Shergaon (Hallberg and Blatter No 22857. type).—Flowered and fruited in October 1916.

STROBILANTHES HALLBERGII Blatter *sp. nov.* [*Acanthacea sectionis Eustrobilanthis. Habitum refert Strobilanthis callosi* Nees *et multis ex partibus etiam structuram morphologicam sed differt bracteis late ovatis non viscosis, calycis segmentis linearibus*

*paullum tantum incrassatis in fructu, ovario subglabro, seminibus multo minoribus rectangularibus basi obliquis omnino glaberrimis.*]

A large shrub, up to 3 m. high Stem and branches rather slender, quadrangular, quadrisulcate, with a few warts, thickened at the nodes, greyish, internodes of branches 7-8 cm. long. Leaves opposite, ovate elliptic, acuminate, running down into the petiole, with dentate ciliate margin, up to 25 cm. long, about ⅓ forming the winged petiole, below and above the inflorescence smaller with much shorter petioles, both surfaces rough, especially the upper which is strongly lineolate and generally with cystoliths which in dry specimens are stellately arranged with a stiff bristle in the centre of each cluster, upper surface dark green, lower paler; main nerves 12-15 pairs, prominent, with short stiff bristles below. Spikes obtuse, strobilate, about 10-flowered, generally 3 together on a common almost round peduncle about 4 cm long and thickened at the junction of the individual peduncles where there are 2 opposite, ovate, obtuse, entire bracts with broad bases, connected by a ring, with numerous cystoliths visible when dry and stellately arranged. 8 mm. long, 4 mm. broad. Lateral peduncles 2, central 3 cm. long with a pair of bracts at a thickened node about ⅓ from the top, similar to the last, but 10 mm. long, 7 mm. broad and with a narrower base. Bracts densely imbricate, one for each flower, broadly ovate, strongly vaulted, rounded at the apex, entire, with numerous cystoliths visible when dry and not stellately arranged, not sticky, pale green, 2 cm. long, almost as broad. Flowers sessile. Calyx subequally 5-partite almost to the base, segments linear, entire, appressedly hairy, veined, 17 mm long, 2.5 mm. broad, slightly enlarged in fruit. Corolla purple, 40 mm. long, glabrous outside, with long yellow hairs within, especially at the place where the anthers of the longer stamens are resting, lobes subequal, spreading, tube about 20 mm long, ventricose, lower third cylindric part 7 by 2 mm. Stamens didynamous, included; longer filaments 10 mm. long, bearded on one side, shorter ones 4 mm. long, glabrous; anthers oblong, yellow, 2-celled, muticous. Ovary 2-celled, subglabrous, cells 2-ovuled; style linear, 20 mm. long, with long stiff hairs directed upwards; stigma with one minute rudimentary branch and one 2 mm. long, linear. Capsule much flattened, 16 mm. long, 7 mm. broad, brown, 2-seeded. Seeds flat, very thin, rectangular, with an oblique lower part and a minute tip, brown, glabrous, 7 mm. long, 4 5 mm. broad.

*Locality.*—Mount Abu in Rajputana: Behind the low ridge N.E. of the Usrat valley while not a single flower was observed on the opposite side of the ridge (Hallberg and Blatter No. 22675, type). Flowered 27th October, 1916. That year was a year of general flowering.

*Vernacular name.*—Gahraj.

DICLIPTERA ABUENSIS Blatter *sp. nov.* [*Acanthacea tribus Justiciearum subtribus Eujusticiearum. Affinis Dicliptera micranthæ* Nees, *differt tamen cymis multifloris, floris labio inferiore integerrimo mucronato, stigmate capitato obliquo.*]

A shrubby, straggling, much-branched plant, up to 50 cm. high. Stems and branches obscurely angular, striate, with short, longitudinal raised lines Nodes slightly hairy. Leaves opposite, petioled, ovate, acute, subentire, sparingly hairy with short stout hairs on the margin and longer ones on the nerves beneath, very variable as to size, largest observed 5 by 2.8 cm. petiole up to 1.5 cm., lower surface lineolate. Flowers in dense axillary cymes, generally 2·3 clusters in each axil, each with about a dozen flowers, with a pair of common bracts 6 by 0.5 mm., subulate, hairy, margins ciliate; sometimes those clusters form a compound cyme with branchlets up to 2 cm. long. Flowers sessile, 2 together of which 1 may be rudimentary. Bracts 2, opposite, ovate-lanceolate, cuspidate 1 larger 8 by 2 mm., 1 smaller 5 by 1.5 mm. with broader base, both with a densely ciliate and scarious margin from the base, on the longer for about ¼ of its length, on the smaller for half its length, rest of margin and nerves on the back with short, scattered hairs directed towards the tip, each pair of bracts enclosing generally 2 flowers, each with 4 bracteoles. Bracteoles subequal, 5 by 1 mm., lanceolate-acuminate with scarious margins from the base to above the middle, margins densely long-ciliated from about the middle to the tip, dorsal side and especially the scarious part with numerous minute sometimes glandiferous short hairs and a line of longer hairs in the middle. Calyx-lobes 5, 3.5 mm. long, subulate, minutely hairy with a few longer cilia. Corolla 4 mm. long, tube 2 mm., white, glabrous, limb small, deep pink, 2-lipped, very hairy on the outside, lips entire, upper rounded, lower entire, mucronate. Stamens 2, one larger anther placed below a smaller one, both opening longitudinally; filaments glabrous, rather stout; pollen globose-oblong. Ovary pubescent upwards; style filiform, 2.5 mm. long; stigma capitate. oblique. Capsule yellowish, 4 by 1.5 mm., placentas separating elastically from the base. Seeds 4, suborbicular, compressed, brown, 1 mm. diam., covered by numerous short, stout, capitate hairs.

*Locality.*—Mount Abu, Dhobi Ghats (Hallberg No. 22856. type). Flowered in November 1916.

LEPIDAGATHIS BANDRAENSIS Blatter *sp. nov.* [*Acanthacea. Folia opposita, sessilia, elliptico-lanceolata, 3-nervosa, in marginibus necnon nervo subtus medio minutissime spinoso-serrulata. Flores in spicis densis unilateralibus dispositi. Spicae multae dense fasciculatae ad redicem vel aliquantulum altius in parte ramorum follis destituta. Bracteae dense imbricatae, fertiles quidem glabrae, ceterae autem hirsutae. Bracteolae dimorphae.*

*Calyx 5-partitus fere usque ad basim; segmenta apice spinosa, omnia intus hirsutissima, minimum etiam in margine extusque aliquamtulum. Labium superius integerrimum, inferius 3 lobatum lobo intermedio crispato, lateralibus undulatis vel subintegris. Stamina inclusa. Antherarum lobi basi acuminati. Stylus basi et in linea ascendenti glandulosus. Capsula duorum seminum ovato-conico-acuta. Semina pilis albis mucilagineis elasticis cooperta.*]

A prostrate herb, woody below, branched from the root. Branches up to 30 cm. long, glabrous, creeping, opposite leaves running down to next node in 2 pairs of narrow wings, those from opposite leaves nearly meeting. Leaves opposite, sessile, elliptic-lanceolate, 2 cm. long, 6-7 mm. broad, margins minutely spinous-serrulate, similar minute spines on midrib beneath; nerves 3, midrib very prominent beneath with 2 very narrow wings making it appear quadrangular. Flowers in dense one-sided spikes 2 cm. long, 1 cm. broad at about the middle. Spikes densely fascicled near the root or a little higher up on the leafless part of the branches; flowers in 2 rows of barren bracts. Bracts densely imbricate, yellowish: barren bracts 12 mm. long (including spine of 4 mm), 3.5 mm. broad, unequal-sided, top from which the spine rises abruptly ciliate, outer surface minutely appressedly hairy; fertile bract greenish glabrous, 13 mm. long, 7 mm. broad tip less pointed. Bracteoles dimorphous: outer bracteole stiff, coriaceous, top suddenly contracted from which a spine rises abruptly, 15 mm. long (including spine of 7 mm.), 7 mm broad, very hairy on the strong keel, less so on one side of it, glabrous on the other, ciliated. inner bracteole stiff, coriaceous, yellowish, 11 mm. long, 2 5 mm. broad, hairy outside and also inside near contraction, tip much recurved. Calyx up to 9 mm. long in flower, to 10 mm. in fruit, 5-parted nearly to base, the 2 larger outer segments 1.5., mm. broad, the lower segment 3 mm. and the 2 lateral segments 1 5 mm., all very hairy inside, the smallest also on margins and, though less so, on the outside; all have an acutely triangular, flat, stiff tip. Corolla 10 mm long; lower part of tube 5 by 1 mm, cylindric, abruptly narrowed at base, white, above is a flattened portion, 2 mm. long and broad, at the base of which are 4 small flat spurs, 2 on each side and 2 below The base of upper surface spotted with pink, colouration otherwise like that of the lips. Upper lip 2 mm. long, entire; at some distance from the anterior margin there are inserted some very long stiff hairs spirally twisted. Colouration: Outside yellowish mottled with light brown and purple, inside yellow, transversely mottled and striped with brown. There is on the inside a narrow longitudinal slit with winged margins, not reaching the anterior margin of the lip. Lower lip 6 mm. broad, 3-lobed about half-way down, midlobe the largest; margin of midlobe crisped, of the lateral ones waved or subentire; each

lobe has a tuft of hairs on the outside, similar to those of upper lip. Colouration: Outside faint lilac striped downwards longitudinally with pale brown and purple, inside faint lilac, with some darker spots, along the midline a row of large yellowish brown spots and along this row 2 lines of hairs on each side, much shorter than on the outside Stamens 4, didynamous, included, inserted a little higher than the ring of spurs on lower part of throat, filaments short, yellow, glabrous; anthers 2-celled, one cell a little higher than the other, cells flattened, attached near tip, purplish, glabrous, slightly divergent, base acuminate; pollen oblong-cylindrical Ovary small, ovoid, glabrous, 2-celled, flattened, each cell 1-2-ovuled. Style 7 mm long, filiform, glandular at base and in a line along the style, long-hairy upwards along the same line, the line not reaching the stigma. Capsule (young) acute at apex, compressed, glabrous, 2-valved, 2-celled. Seeds 2, one in each cell, densely covered with white mucilaginous elastic hairs.

*Locality.*—Bandra, near Bombay (Hallberg No. 74,501, type).—Flowered in November 1916.

There is no doubt that this species belongs to the group of *Lepidagathis* which comprises the species *cristata* Willd, *Hamiltoniana* Wall. and *mitis* Dalz. It combines characters which are peculiar to each, but does not agree in the totality of characters with any of them. It is a very distinct species. Apart from many other details it can certainly be distinguished by the dimorphous bracts and bracteoles.

LEPIDAGATHIS SUBMITIS Blatter *sp. nov.* [*Acanthacea Aliquibus in partibus Lepidagathem cristatam* Willd, *necnon L mitem* Dalz. *refert, distinguitur tamen a priore foliis lineari-lanceolatis undique hirsutis, bractea unica spathulata apice rotundata, bracteolis cymbiformibus crassissimis, calycis segmentis usque ad basim 4-partitis, parte corollae inferiore lageniformi 9-nervosa, labio superiore brevissimo, seminibus oblique cordatis, a posteriore autem differt bracteolis inaequalibus apice spinosis, calycis segmentis omnibus apice spinescentibus perfecte liberis usque at basim.*]

A prostrate herb, woody below, branched from the root; root very stout; branches slender, creeping, up to 25 cm. long, glabrous, thickened at the nodes, acutely quadrangular (almost with wings which are green). Leaves opposite, sessile, linear-lanceolate, acute, obscurely undulate, all over with short, stiff, stout hairs, especially on the margin and on the nerves beneath, midrib depressed above, very prominent beneath, side-nerves 5-6 on each side. Inflorescence consisting of a semiglobose, very dense mass just above, the root, 5 cm. diam. (the spikes cannot be clearly distinguished and they are not disagreeable to touch). Bract 1, spathulate, herbaceous, 10 by 3 mm., apex rounded, very long-hairy all over. Bracteoles 2, the larger 10 mm. long, 3 mm. broad

at base, tapering, obliquely boat-shaped, very thick, tipped with a straight, round, hard spine about 1 mm. long, along the keel and at the base outside as well as along the whole margin very long-hairy, inside glabrous; smaller bract 7 by 1.5 mm, symmetrical, otherwise like larger one. Calyx in flower 7 mm. long, in fruit 11 mm., 4-partite to the base; 2 outer segments larger, upper obovate, 2.5 mm. broad, lower similar in shape but slightly bifid, inner segment very narrow, linear-lanceolate, all segments with a stout, round, stiff spine, all densely hairy all over with long white hairs. Corolla 10 mm. long, lower part 3.5. mm. long, glabrous, white, bottle-shaped, 9-nerved, the nerve running out into midlobe of lower lip the strongest, a greater interval between the nerves on opposite side of tube; upper ventricose part 2 mm diam., 2 mm. long, glabrous, yellowish, with 6 faint nerves and 2 oblique, faint-brown stripes above, 3 strong nerves and a few brownish spots below, lower end of ventricose part ending in 4 small sacks, 2 corresponding to lower lip, 2 on the side. Upper lip very short, 1.5 mm. long, patently hairy outside, glabrous inside, only very slightly notched at tip where there is a tuft of short hairs. Lower lip spreading, 3-lobed, midlobe 3 times as broad as the side-lobes, broadest a little below the middle, margins of midlobe lacerate, of the side-lobes entire, the whole lower lip outside hairy—except the margin of midlobe, in centre of midlobe inside a large tuft of very long hairs; in the throat and lower lip 2 rows of long hairs, also some minute hairs in the vicinity of the sacks Stamens 4, didynamous; filaments very short, especially of the shorter stamens, somewhat flattened, spotted with brown, glabrous; anthers 2-celled; cells about equal, one placed a little above the other, dorsifixed, muticous, opening longitudinally, flaps slightly hairy on margins; pollen oblong, yellow. Style 5 mm. long, filiform, with a row of a few long hairs for about ½ of its length from the base; stigma minute. Capsule broad at base, tapering to a subsolid tip, scarious on back, glabrous, flattened. Seeds 2, thin, obliquely heart-shaped, covered with a dense mass of very long mucilaginous hairs.

*Locality.*—Madras Presidency: Bellary (Hallberg and Blatter No. 9986, type).—Flowered and fruited in December 1916.

CARDANTHERA ANOMALA Blatter *sp. nov.* [*Acanthacea tribus Ruelliearum subtribus Polyspermearum Ab omnibus Cardantheræ speciebus differt stamine unico fertili et staminodio uno, seminibus* 10-12 *tantum, instructis retinaculis curvatis.*]

A prostrate herb growing on damp ground, branched from the root. Stems creeping, rooting at lower nodes, subquadrangular, hairy in rows, hairs pointing downwards, swollen at nodes, internodes up to 2 cm. long. Leaves up to 28 by 11 mm. subsessile, obtuse, subentire, insensibly passing into smaller

bracts, margins strongly ciliate, upper surface hairy, lower less so, but midrib below with a few long stiff hairs. Bracteoles 2, lanceolate, as long as the calyx, very hairy on both surfaces with strongly ciliate margins. Flowers distant, solitary, axillary, sessile. Calyx 4 mm. in flower, 5 in fruit, 5-lobed, divided nearly to the base, lobes linear-lanceolate, acute, very hairy. Corolla 5 mm. long, pure white, 2-lipped, lobes twisted to the left in bud, lips of equal length, ½ of the whole, pubescent outside as is also the upper somewhat compressed part of the tube. Upper lip shallowly 2-lobed, lower lip deeply 3-lobed, lobes rounded. Stamens 2, one fertile, one barren, included; anther-cells 2 parallel, large, oblong, erect, muticous, separate, yellow; filament running down the whole length of the tube and adnate to it. at the point of separating a staminode with hooked tip; base of filaments of stamen and staminode joined by a sheath with long hairs. Ovary many-ovuled, pubescent. Style reaching above the calyx with upwards directed hairs, stigma shortly unequally bilobed. Capsule linear-oblong, subtetragonal, 2-grooved, 7 mm. long, 1.2 mm diam., minutely pubescent at tip. Seeds about 10-12 in two rows, one row in each cell, on slightly upcurved retinacula, light brown, more or less tetragonal, margins hygroscopically hairy, sometimes also the surfaces partly.

I have put this species under *Cardanthera* for want of a better place. Prof Hallberg who found this plant was in favour of making a new genus I do not feel very confident about this proposal, especially as the new species seems to be a very variable one in other parts, though very constant regarding the stamens.

In a specimen growing in water near the Vehar Lake (Salsette) we noticed the following differences: Stem glabrous, stouter, ascending, rooting from the submerged nodes. Internodes much longer, up to 4.5 cm. Leaves up to 3.5 by 1.4 cm., ovate or obovate, margins minutely stiff-hairy, otherwise glabrous. Bracteoles much larger than calyx, up to 10 by 2 5 mm., unequal-sided. Calyx unequally deeply divided, but not near to its base, less hairy (Nov. 1916).

Another specimen gathered at Khandalla in the W. Ghats showed amongst other differences the following: Bracteoles ovate-elliptic, equal to, or shorter than the calyx Calyx 4.5 mm. long in flower, divided only a little more than half-way down.

The stamens are evidently in a state of transition, in which direction is difficult to say. Light may be thrown on this question as our knowledge of the Indian *Acanthaceæ* increases. It is a very rich family, but a great number of species have yet to be described.

The fact that another very anomalous species (*Cardanthera Thwaitesii* Benth.) has already been put under *Cardanthera* by

C. B. Clarke, has encouraged me to do the same with the new species. *Cardanthera* requires revision and its general characters must be more clearly defined

*Locality*: Bombay Presidency: Vehar Lake in Salsette (Hallberg No 9766, type), Tardeo, Bombay Island (Hallberg No. 9767, cotype).—Flowered and fruited in November 1916.

*Scrophulariaceæ*

*Limnophila* [1] *polystachyoides* Blatter *sp. nov.* [*Scrophulariacea. Accedit ad Limnophilam polystachyam, sed distinguitur foliis superioribus serrulatis (non crenulatis) bracteolis triangulari-acutis (non lineari-lanceolatis), calycis segmentis anguste triangularibus subacutis vel obtusis (non ovato-acuminatis), capsula calyce tota inclusa, 4-5 mm. longa ovoidea.*]

A paludine herb, 90 cm. long, erect or ascending from a floating portion which is densely clothed with capillaceo-multifid leaves. Stem stout, sparingly and finely muriculate, here and there with a straight hair; upper (flowering) part pentagonal in transverse section. Lower leaves all capillaceo-multifid; upper ones opposite or in whorls of 3 (in the same plant), 2 cm. long, 7 mm. broad, entire; lanceolate-acute to linear in the highest region and much shorter, sessile, serrulate (not crenulate), 3-nerved from base running up to the tip, mostly with an additional pair running half-way up. Flowers sessile in terminal spikes about 6 cm. long; lower part of inflorescence lax, upper very dense with very small floral leaves which are shorter than the flowers Bracteoles triangular-acute, a little more than 1 mm. long. Calyx 3.5 mm. long, divided half-way down, sepals rounded-keeled on back, slightly subequal, central part of each sepal green; teeth 5, narrow-triangular, as long as tube subacute or obtuse, finely muriculate on margin and on central line of back with a few hairs at the tips. Corolla at least twice the length of calyx, white, woolly inside. Capsule entirely enclosed by calyx, 4-5 mm. long, ovoid, minutely papillose, glabrous, shining. Seeds brown, elongate, ½ mm. long, broader at apex than at base, 4-5-sided, truncate at both ends, finely tuberculate.

*Locality*: Bombay Presidency: Salsette, near Marol in pool. (McCann and Blatter No. 12345, type).—Flowered and fruited in December 1916.

---

[1] I wanted to go back to the oldest name of the genus, viz.: *Ambulia* Lam., but Miss M. L. Green of the Kew Herbarium informs me that although the genus *Ambulia* Lam. antedates the genus *Limnophila* R. Br. it cannot be used, as the genus *Limnophila* R. Br. is a *nomen conservandum* and is conserved against *Ambulia* Lam. (1783) as well as against *Diceros* Lour. (1790) and *Hydropityon* Gærtn. f. (1805).

*Euphorbiaceæ*

***Euphorbia panchganiensis*** Blatter and McCann *sp. nov.* [*Pertinet ad sectionem Rhizanthii; refert multis in partibus E. acaulem* Roxb. *a qua tamen distinguitur cymis multis e collo surgentibus, forma bractearum, seminibus rotundis non subacutis. Similis etiam Euphorbiæ khandallensi* Blatt. and Hall. *a qua tamen differt cymis numerosis, eisque ter tantum dichotomis, stylis ad medium connatis.*]

Underground rootstock irregularly cylindric, horizontal, up to 20 cm. long and more, about 7 cm. diam., producing stout roots on all sides. Leaves broadly or narrowly lanceolate or oblong, or oblanceolate, often with wavy margin, fleshy, purple or green or red or mottled, radical, appearing after the owers. Peduncles round or compressed, arising in dense bunches from a stout neck about 2 cm. in diameter and as long or longer (the length depending on the depth at which the rootstock lies). Cymes (together with peduncle) on the average 6 cm. long, stout, fleshy, usually reddish, purple or pink or greenish all over except for the lobes of the involucre which are light pink and the bracts which are purple, pink or whitish, branching dichotomously up to 3 times. Bracts very variable, scarious, rigid, usually turning white, at the lower forks triangular-acute or triangular-lanceolate, with wavy margin, 1-nerved, upper bracts semi cylindric, bases semi-amplexicaul, apex acute, recurved. Involucre 6 mm. across; lobes spathulate, fimbriate-pectinate, pink; glands transversely and broadly oblong. Anthers purple, opening at the apex; pollen yellow, ellipsoid. Styles connate to the middle. Capsule 4 mm. long, 7 mm. broad, trisulcate; cocci 3 (sometimes 4) compressed or sometimes rounded. Seeds globose, 3 mm. diam., smooth, black when fresh, later on grey.

*Locality*: Bombay Presidency: Panchgani, Tableland, 4400 ft. (Blatter and McCann No. 102 type, 103, 104 cotypes).—Flowered: April 1926.

*Notes*:—This plant is very common on all the tablelands in the neighbourhood of Panchgani. It flowers from November to May, but especially during the hot season, when the laterite ground is absolutely parched and only covered with dry low grass. The flowers come up in great masses and whole purple patches of them may be seen. They have apparently no enemies, as goats, sheep, and cows do not touch them. They are mostly purple or red, evidently endowed with that colour as a protection against the sun in localities where there are no trees or shrubs or even herbs to protect them.

The leaves begin to come up with the monsoon. Green in the beginning they turn purple or red towards the end of the rainy season and by October large areas of the tablelands are coloured a deep purple or a bright red. By November the

leaves begin to disappear. but flowers and leaves are never seen on the same plant at the same time.

There are, as pointed out above, two other species which resemble the new one very closely: *E. acaulis* Roxb. and *E. khandallensis* Blatter and Hallberg. Somebody might point out that these 3 species deserve a similar fate as *E. acaulis* Roxb. and *E. nana* Royle which were united by J. D. Hooker under *E. fusiformis* Ham. (*Fl Brit. Ind*, V, 258). All had been considered as distinct species by Boissier (DC. Prodr XV, II, 93, 94) Hooker gave this reason for combining them: "Unlike as Royle's *nana* is to Roxburgh's figure of *acaulis*, I am convinced that these are merely forms of one, the length of the cyme probably depending on the moisture of the soil, and whether produced in open ground or amongst herbage. The Concan specimens are intermediate"

If Hooker in his specimens saw only differences in the size of the cymes, we would, in a general way, agree with him that edaphic conditions can produce a distinct growth. But even here we could mention that we have grown plants of the new species under varied conditions, *i.e.*, without water and in water, and the cymes, morphologically considered, were always more or less the same, except that they were green when out of the direct sun-light

It must also be admitted that Boissier's descriptions of *E. fusimormis* and *E. nana* did not mention any good distinctive characters, but then we must remember what he says of the first: "*Planta ex icone et descript cit. mihi tantum nota*", and of the second: "*Ex descriptione et icone valde rudi tantum nota*".

So much about Hooker's combination who was able to examine Hamilton's and Royle's specimens

As regards the new species and those closely allied to it, it can be seen from the descriptions of *E. khandallensis* and *panchganiensis* that not only the size of the cymes has been considered but also their number, the bracts, the styles and the seeds. The co-operation of botanists in other parts of India is kindly invited.

*Hydrocharitaceae*

BLYXA ECHINOSPERMOIDES Blatter *sp. nov.* [*Hydrocharitacea similis Blyxae echinospermae* Hook. f. *sed differt foliis basi angustioribus quam in medio, polline subgloboso spinoso et seminibus papillosis, non spinosis* ]

Stemless, densely tufted, submerged. Leaves linear, acute, narrowed from below the middle to the base, glabrous, serrulate, up to 30 cm. long, 1 mm. broad; midrib strongly prominent beneath, very swollen and spongy towards the base; upper surface flat; the leaves have a purplish hue and show irregular transverse darker lines when held against the light.

Scape growing up to 17 cm. in fruit, much compressed, spongy. Spathe ca. 65 mm. long, 4 mm. broad, 2-toothed, much flattened, each side with obscure nerves, 2 of which are slightly more prominent. Before the flower is developed there is a deep groove between these nerves along the empty part of the spathe; the spathe attains its full length already in bud Flowers hermaphrodite, solitary, sessile in the spathe, up to 11.5 cm. long; bud trigonous Sepals 3, 10 mm. long, 1 mm. broad, green, streaked with purple, linear, obtuse. Petals 3 10 cm. long, ½ mm. broad at base, filiform, yellowish, tip twisted, white. Stamens 3, about half as long as the sepals; anthers 1 mm. long, narrow, erect, shortly beaked, yellow; pollen subglobose, covered with numerous short spines. Styles 3, up to 18 mm long, linear, terete, at first white, later greenish; stigma obtuse, papillose Capsule terete, long-beaked, seed-bearing for about ⅘ of the part covered by the spathe. Seeds white, ellipsoidal, about 1½ mm. long not counting the tails, strongly papillose, with a curved tail at each end slightly longer and shorter than the seed respectively. (Some plants have seeds with both tails longer than the seed itself and in this case the papillae are longer.)

*Locality*: Bombay Presidency: Vehar Lake, Salsette (Hallberg No 1555, type) —Flowered and fruited in November 1916.

*Note*: The genus *Blyxa*, Noronha is in a bad state. J. D. Hooker (*Fl. Brit Ind.*, V, 660) makes the following remark: "Under this genus the following Indian forms occur. These present such diverse characters that it is difficult to suppose they do not represent species; on the other hand, water plants are so variable, and herbarium specimens of them are so unsatisfactory, that I must leave it to Indian botanists to work up the genus".

J. D. Hooker mentions 7 species of which 6 were described by him. The great difficulty is to fix on constant characters.

The leaves cannot be considered as constant, neither their size nor their shape. *Blyxa echinosperma* Hook. f. has leaves measuring from 15 cm to 1.2 m., *B. octandra* Planch. from 20-60 cm., *B. ceylanica* Hook. f. from 15-60 cm. If the limits of length in other species are not so far apart, it must in all probability be ascribed to the fact that only one or a few specimens were examined

The shape of the leaves is just as little reliable. Hooker has grouped his forms under 2 headings: (1) "Leaves broad at the base, narrowed upwards to the acuminate tip" and (2) "Leaves narrowed from below the middle to the base".

The new species comes very near *B. echinosperma*, and may prove some day to be identical with it, and still its leaves are narrowed from below the middle to the base, whilst the leaves of *B. echinosperma* are broader below.

The scapes and spathes are equally variable, except that the male flowers are enclosed in a 3-toothed spathe, while the hermaphrodite and male flowers are surrounded by a 2-toothed spathe (Hooker seems to be mistaken when he says that the spathe of the female flowers is that of the male).

"Dioecious" and "hermaphrodite" flowers seem to form a good character. The sepals and petals seem to be fairly uniform, but differ in size and colour, characters which do not count much in water-plants.

The number of stamens may be utilized in classification as soon as they are better known.

Pollen, fruit and seed seem to vary a good deal in the same species.

Before me are 2 specimens gathered in the same locality and on the same day I have every reason to assume that they are identical with the new species. They were described from fresh specimens and they were found to agree with the new species though disagreeing in quite a number of characters which in the meantime I consider as variable If they should, in course of time, prove to be constant, the two specimens must be treated as new species.

1st specimen: Flowers up to 16 cm. long. Spathe 6.5 cm. long, 4 mm. broad. Pollen ovate-oblong, slightly oblique, less spiny than in the new species. Seeds narrowly ellipsoidal, with a stout tail nearly as long as the seed, broad at its base where there is also a small process; length of seed and tail 1.5 mm.; surface minutely, irregularly wrinkled, not papillose or striate. The younger seeds are exactly like the younger seeds of specimen 2

2nd specimen: Scape up to 27 cm. long in fruit. Spathe 3.5 mm. broad. Pollen more or less angular (somewhat obpyramidal with numerous short spines. Seeds not half the length of new species, with a tail shorter than the seed at one end and a minute process at the other, not papillose, surface minutely interruptedly striate. Younger seeds broadly oblong, umbonate.

I am afraid it will take a long time before we are able to give a somewhat satisfactory account of this widely spread genus in India. Also here I invite my colleagues' co-operation. But the only way of obtaining reliable information is to write a detailed description from fresh specimens or to keep the specimens in formalin. Herbarium specimens, even well prepared, are not of much use.

HYDRILLA POLYSPERMA Blatter *sp. nov* [*Hydrocharitaceæ. Similis Hydrillæ verticillatæ* Presl, *sed, differt spatha feminea apice acuta non bidentata, stigmatibus non fimbriatis sed coopertis pilis stigmaticis. seminibus numerosis ovatis basi truncatis, testa non producta.*]

A submerged, green, delicate, leafy fresh-water plant, form-

ing large masses. Stem much branched. Branches filamentous, from $\frac{3}{4}$ mm. diam. to almost capillary. Leaves opposite or more usually in whorls of 3 or 4, seldom 5, 11-12 mm. long, 2 mm. broad, linear-lanceolate, finely spinulose-serrulate, tip spinous, mid-rib slightly paler than the rest. Flowers diœcious. Male flowers solitary in a bell-shaped spathe, female flowers usually solitary in a tubular spathe. Male flowers: Spathes usually 2 or 3 in a whorl, bell-shaped, membranous, 3 mm. long, slightly 2-lobed, with about 10 long fleshy conical teeth projecting outwards from a little below the margin of the mouth forming a subregular ring. Flowers minute, short-stalked, solitary. Sepals 3, broadly ovate, deeply concave, obtuse, about 2 mm. long. Petals 3, strap-shaped, slightly widening towards apex, tip triangular, slightly longer than sepals, bent inwards, included. Stamens 3, about as long as sepals; filaments twice the length of the anthers, stout; anthers large, bilocular, opening longitudinally; pollen globose Female flowers: Spathe 8 mm. long, narrow-tubular, apex acute. Perianth 5 mm. long. Sepals 3, oblong-lanceolate, flat, slightly incurved at tip and mucronate about 1 mm. broad in the upper third, greenish white. Petals 3, slightly incurved at tip, almost identical in shape with the sepals, but smaller, white Ovary cylindrical, produced into a very slender beak, full of mucilage; ovules many, anatropous. Styles 3, fleshy, slightly tapering, about half the length of the petals, covered with long stigmatic hairs, (not fimbriate) Seeds many, small, ovate, truncate at base with a strong ridge running down on one side from the apex, getting broader towards the base (testa not produced at either end).

*Locality*—Rajputana: Mount Abu, Naki Talao, about 4,000 ft. (Hallberg and Blatter No. 11189, type).—Flowered and fruited in October 1916.

## *Zingiberaceæ*

CURCUMA INODORA Blatter *sp. nov.* [ *Zingiberacea subgeneris Eucurcumæ* K. Schum. *sectionis Exanthæ*. *Rhizoma radicibus copiosis filipendulis tuberiferis instructum; Tubera intus alba, inodora. Folia cum floribus oriunda, immatura 24 cm. longa, 10 cm. lata. apice acuminata, plicata; petiolus 16 cm. longus, profunde concavus, alatus. Inflorescentia vernalis, lateralis; pedunculus 10 cm. altus. Bracteæ inferiores breviores et latiores superioribus, pallide virides rubro-tinctæ, superiores roseæ apice purpureæ, omnes apice truncatæ, rotundatæ vel emarginatæ. Calyx 1 cm. longus, tubuloso-trigonus, apice breviter et irregulariter 3 lobus; tubus minutissime pubescens. Corolla 3.5 cm longa; tubus 2 cm., lobi 1.5 cm. longi; lobus dorsalis apiculatus, lateralibus dimidio latior, lobi laterales retusi, omnes ovati vel ovato-lanceolati, concavi, purpurascentes, ad apicem subsaccati. Staminodia et labellum subæquilonga, aliquantulum excedentia petala. Staminodia oblonga, 5–7 mm. lata, truncata, purpureo-rubra. Labellum*

*obovatum obscure 3-lobatum vel subintegrum, 1.5 mm. latum, marginibus crispum, purpureo-rubrum, ad medianum intense flavum per totam longitudinem. Filamentum 3 mm. latum, purpureo-rubrum connatum cum staminodiis; anthera alba, basi et calcaribus roseis. Ovarium dense hirsutum. Stylus roseus; stigma album, obliquum, bilobum.*]

Base of plant a rhizome; root-fibres numerous, bearing ovoid tubers 4 cm. from their base; tubers 2-2·5 cm. by 1·5-2 cm., white inside, divided into an outer and inner part by means of a membrane visible in a section as a distinct line following the outlines of the tuber, no smell, taste rather pleasant. Leaves appearing together with flowers, all enclosed in 2 olive or purplish green sheaths, which are many-nerved, rounded at tip, sometimes apiculate, 8 and 15 cm long respectively. Young leaf: Blade 24 by 10 cm. with the apex acuminate, plaited with about 20 pairs of ridges following the main nerves; petiole 16 cm., deeply concave, winged. Inflorescence vernal, lateral; peduncle 10 cm. long, narrow below, stout above, with many sheaths at base. Lower bracts much shorter and broader than upper, pale green tinged with pink, margins waved, tips of all the bracts truncate, rounded or emarginate: upper bracts forming a coma, rose-coloured, tips purple Calyx 1 cm. long, tubular, trigonous, widening upwards, shortly and irregularly 3-lobed at apex; tube sparsely minutely pubescent. Corolla 3.5 cm., tube 2, lobes 1.5 cm., tube sharply bent in a little (3mm.) below the sinuses at which point it widens out. Up to this point tube below with 2 anterior fleshy whitish ridges with a furrow between, together 3 mm broad Dorsal lobe 1½ times as broad as side lobes,, apiculate, side-lobes retuse, all ovate to ovate-lanceolate, concave, purplish, obscurely nerved, subsaccate near tip. Staminodes and lip subequal in length, surpassing tip of petals by 2 or 3 mm. Staminodes oblong, 5 mm. broad near tip, 7 mm. lower down, truncate, purplish red. Lip obovate, obscurely 3-lobed or subentire, 15 mm. across, margins crisped, apex bifid, with a faint longitudinal furrow on both sides; colour purplish red, a bright yellow band running longitudinally, broadest anteriorly, fainter below and on the outside, in its broadest part about 5 mm. Filament 3 mm. broad, connate with staminodes below, purplish red, free portion bent in; anther white with pink base and spurs which are bent inwards. Ovary 3 by 2 mm., densely hairy, hairs directed upwards. Style pink; stigma oblique, white, bilobed, anterior margin straight, posterior with two diverging processes.

*Locality.*—Bombay Presidency: Moolgaum, Salsette (Hallberg No. 12724, type).—Flowered in June 1917.

CURCUMA PURPUREA Blatter *sp nov. Zingiberacea subgeneris Eucurcumæ* K. Schum *sectionis Mesanthæ* Horan. *Accedit ad Curcuman decipientem* Dalz. *sed differt uno tubere*

*sessili intus pallide flavo foliis multo latioribus, bracteis floriferis apice non saccatis, corolla multo longiore, labello obscure 3-lobato vel integro, corollæ tubo calyce triplo longiore, corollæ segmentis apice subsaccatis. Similis quoque multis in partibus Curcumæ inodoræ* Blatter, *sed distingui potest inflorescentia autumnali, centrali et absentia tuberum sessilium, corollæ lobo dorsali longe mucronato. lateralibus autem rotundatis, stylo albo.*

Root-fibres thick; one sessile, transverse tuber, 4 cm. long, 1 cm. diam., pale yellow inside, faintly aromatic. Leaves and flowers contemporary. Leaves about 20 cm long and 8 cm. broad, acuminate, plaited, petiole about 15 cm. long, deeply furrowed, winged. Lower bracts shorter and broader than the upper, pale green, tinged with pink, margins wavy, upper bracts forming a coma, rose-coloured, tips purple, all the bracts truncate, rounded or emarginate, (not saccate). Calyx 10 mm. long, tubular, trigonous, shortly and irregularly 3-lobed at apex, widening upwards. Corolla 4.3 cm.. tube 3 cm., beginning to widen about 1.7 cm. from the base, but not sharply bent-in, white (without fleshy ridges); dorsal lobe 1½ times as broad as side-lobes, long-mucronate, side-lobes rounded at apex, all ovate to ovate-lanceolate, concave, purplish, subsaccate at tip. Staminodes and lip almost of equal length, surpassing tip of petals by a few mm Staminodes oblong, 8 mm broad, truncate, purplish red. Lip obovate, obscurely lobed or subentire, 15 mm. across, margins acrisped, apex bifid, colour purplish red, a bright yellow band running longitudinally, about 8 mm., broad, in front occupying almost the whole midlobe. Filaments 2 by 3 mm , connate with staminodes below, purplish red; anther white, base with spurs pink. Ovary densely soft-bristly upwards. Style white: stigma oblique, bilobed.

*Locality.*—Western Ghats: Khandalla (Hallberg No. 14566, type).—Flowered during the early monsoon 1917.

Kaempferia Evansii Blatter *sp. nov.* [*Zingiberacea tribus Hedychiearum pertinet at genus Kaempferam sectionis Monolophi. Herba perennis. Caulis crassus, foliosus ad 60 cm. altus. Folia lanceolata vel elliptica, acuminatissima, infra pubescentia, in petiolum brevem decurrentia, usque ad 27-36 cm. longa, 8 cm. lata. Flores laxe spicati, terminales. Bracteae uniflorae, spathaceae, glabrae, 2·5 cm. longae. Calyx tubuloso-spathaceus, 4·5. cm. longus, membranaceus, apice fissus per 1 cm. Corolla glabra, tubus 7 cm. longus, pallide aurantiacus, lobi 4 cm. longi, anguste lineares marginibus involutis, pallide flavi. Staminodia 2, anguste linearia, 5 cm. longa, 3 mm lata, alba. Labellum 4·5 longum, 2·5 cm. latum, cuneatum, bifidum per 1·5 cm., album unguiculo aurantiaco. Stamina 4 cm. longa, rubra. Antherae 2.5 mm. lata, lobi in-aequales, 7 et 6 cm. longi, paralleli, basi liberi. Connectivi appendicula subulata, subflava, 1 cm. attingentia. Ovarium subtrigonum, ca. 1 cm. longum, glabrum,*

*3-loculare ovulis multis. Stylus flavus, generatim antherarum lobis quidem sed non appendiculis longior. Stigma capitellatum penicillatum.*]

A perennial herb. Stem about 60 cm high, stout, green, clothed with the sheaths of the distichous leaves. Leaves 36 by 7 to 27 by 8 cm., lanceolate or elliptic, very acuminate, finely pubescent beneath, running down into a very short petiole. Flowers laxly spicate, terminal. the lowest 3 cm apart, faintly fragrant ; axis of inflorescence angular, grooved, glabrous. Bracts 2·5 cm long, 1 to each flower, spathaceous, enclosing the calyx, nerved, glabrous. Calyx 4·5 cm long, tubular, narrow, spathaceous. membranous, split for about 1 cm., limb obtuse, nerved. Corolla glabrous, tube 7 cm. long, narrow, cylindrical, pale orange ; lobes 4 cm. long, narrowly linear, broadest (4 mm.) a little below the acute contracted tip, 3-nerved, with the margins rolled in, pale yellow. Staminodes 2, narrowly linear, 5 cm by 3 mm., broadest near the obtuse tip, 3-nerved. white. Lip 4·5 by 2·5 cm., broadest outwards, cuneate, bifid for 1·5 cm. white, fading yellow, with a distinct orange claw. Stamen 4 cm. long, red ; filaments very narrow ; anther 2·5 mm. broad, anther-cells unequal. parallel, 7 and 6 mm long respectively, with a yellow line, free at the base ; connective crested, produced into 2 subulate unequal yellowish tails, reaching 1 cm. in length. Ovary slightly trigonous not 1 cm. in length, glabrous, 3-celled ; placentas axile ; ovules numerous ; 2 thick, conical, obtuse, bright yellow excrescences, 3 mm. long, on ovary at base of corolla-tube (rudimentary styles). Style yellow, very slender, glabrous, generally overtopping the anther-cells, but not the tails. Stigma small. yellow, capitellate, transversely compressed penicillate. with a depression on top.

*Locality* : Madura District : Gathered on the High Wavy Mountain, 5,500 ft., in May 1917, flowered in Bombay in September 1917 (Hallberg and Blatter No. 7744, type).

### *Amaryllidaceæ.*

PANCRATIUM DONALDI Blatter *sp. nov* [*Amaryllidacea, accedens ad Pancratium parvum* Dalz. *necnon P. St. Mariae* Blatter and Hallberg. *Differt a primo corona lata conica et scapo fortissimo, ab altero stylo non incluso er perigonii tubo multo longiore necnon distincte trigono.*]

A perennial glabrous herb. Bulb globose, ca. 4 cm. diam., tunicate, brown ; neck cylindric, up to 3 cm. long. Leaves at time of flowering 2, leathery, lanceolate, acute or obtuse. reaching about ⅔ up the scape. Scape very stout, compressed, almost smooth, or striate or ribbed, up to 10 cm. long, green. Flowers fragrant, 2–5 in an umbel. Spathe 1,

very broadly ovate, bifid at apex, membranous, whitish, transparent. Pedicels up to 1 cm. long. Perianth-tube up to 9 cm. long, greenish below, white above, distinctly trigonous, slightly dilated above; lobes white, reaching 3 cm. by 1 cm., broadly lanceolate, suddenly contracted into an awl-shaped apiculus 3·4 mm. long, at the base of the apiculus above a small horn pointing inwards. Staminal cup 1 cm. long, broadly conico-trigonous, with 6 longitudinal folds truncate at apex with bifid teeth between the filaments Filaments longer or shorter than teeth of cup. Anthers about 4 mm. long, yellow. Style filiform, about 11 cm.. protruding for about 1 cm. beyond the anthers. Stigma subtrilobed. Ovary cylindrical-trigonous. 3-celled, many-ovuled.

*Locality*: Bombay Presidency: Panchgani, Second Tableland in grass on laterite soil exposed situation, only found in an area of about 50 sq. yards (Donald Elkins No. 758, type, 759, 760, 761 cotypes).—Found flowering 10th June. 1928.

*Liliaceæ*

CHLOROPHYTUM GLAUCOIDES Blatter. *sp. nov.* [*Liliacea. accedit ad C. glaucum* Dalz, *sed differt forma foliorum, petiolo longo, scapi vaginis paucis, perianthii segmentis longioribus et latioribus anguste oblongis, capsulis triquetris, loculis 6-7-ovulatis, seminibus basi cordatis.*]

Root-fibres very numerous. cylindric, white, up to 30 cm. long. Leaves 6–14, radical, membranous-leathery, lanceolate. long-acuminate, grass-green above, glaucous beneath, glabrous, attenuated into a long winged petiole. Scape strict, simple, up to 65 cm long, smooth, dark green, provided with 1 or 2 long, lanceolate-acuminate chartaceous sheaths 8 cm. long and 15 mm. broad at the base. Higher up the sheaths become smaller till they pass into broadly ovate or ovate-lanceolate, acuminate, almost amplexicaul, scarious bracts which are persistent (not forming a coma before flowering), brown in the upper part when young, later on turning brown all over, the lower part being almost brown-black, with many black nerves in the central part, 1·5–3 cm. long, smaller upwards: higher up the bracts form a tube surrounding the flowers with their bracteoles, greenish-white, about 8 mm. long, 4 mm. broad, slightly compressed, truncate at apex and brown, with 2 teeth on opposite sides, one tooth acuminate and longer, the other acute. Flowers white, in simple, dense racemes, 15–30 cm. long, 1·5–2 cm. wide. Pedicels of bud ascending, when the flower opens at right angles to the axis and again ascending in fruit, 5–15 mm. long, stiff, comparatively stout, white, articulated about the middle or higher up, 2-3-nate, elongated in fruit up to 22 mm., but only the part below the articulation. Bracteoles 1 for each flower: bracteole of the flower which

opens first very small, oblanceolate, white, scarious, about 3 mm. long, of the second flower broadly ovate, sub-acuminate with a tuft of tiny hairs at apex, white of the third flower very broadly obovate, suddenly contracted into an acuminate apex which has a tuft of small hairs, white with green in the centre, margin brown. Perianth segments up to 13 mm. long, 4 mm. broad, narrowly oblong, subobtuse or minutely apiculate, inner lobes slightly broader, all spreading, later on deflexed. Filaments white, up to 8 mm. long, minutely papillose; anthers yellow, 4-5 mm long. basifixed, slightly bilobed at base, introrse, longitudinally dehiscing. Ovary 3-lobed, green. Style up to 1 cm. long. white; stigma minute, not thicker than the style Capsule coriaceous, emarginate, triquetrous, acutely 3-winged, 10 mm. long and broad. Seeds 6-7 in each cell, orbicular cordate at base, flat convex and coarsely wrinkled on the side touching the carpel, slightly concave on inner side.

*Locality*: Bombay Presidency: Panchgani, beyond the Mahomedan High School (Blatter P73) Flowered middle of August 1925.

Usually only 2 or 3 flowers are open at the same time.

The fact that the pedicel of the bud and the fruit is ascending whilst it is at a right angle to the axis when the flower opens can be explained as a mechanical reaction As the pedicel is very short there is no room for the spreading flower to expand freely as long as the pedicel forms an acute angle with the axis of the raceme.

In the above diagnosis I have described bracteoles In no description of Indian *Chlorophytums* have bracteoles been mentioned. There is scarcely a doubt about the morphological character of the structures which I called bracteoles, and which I have examined repeatedly It is quite possible that those details in a dried state have escaped the eyes of observers as it has happened so often, especially in Monocotyledons. The descriptions of most of our fleshy Monocotyledons are in a deplorable state. These plants cannot be satisfactorily described from dried specimens. Indian botanists would render a great service by writing as detailed descriptions as possible from live specimens, and by sending them together with well-preserved specimens to Kew or the British Museum This would lead, in course of time, to the elimination of many mistakes that have crept into the treatment of the Monocotyledons.

In the key to the *Liliaceae*, J. D. Hooker (*Fl. Brit. Ind.*, VI, 301) characterizes the ovary as 4–6-ovuled. In our species each cell contains 6–7-ovules.

### *Araceæ*

ARISAEMA LONGECAUDATA Blatter *sp. nov.* [*Aracea sectionis Clavatorum. Similis Arisœmati Leschenaultii* Bl. *sed*

*differt spatha viridi longitudinaliter albo-vittata, spatharum acuminibus longissimis, spadice fere duplo maiore, spadicis appendice uniformiter cylindrica a basi leviter incrassata minime claviformi, multo longiore, stigmatibus non sessilibus, floribus masculis omnibus stipitatis.*]

Whole plant reaching 1 m and more, as a rule dioecious. Tuber depressed-globose; root-fibres numerous, from the upper side of the tuber, less tough than in *A Murrayi.* Leaf solitary, peltate; petiole stout, straight, up to 60 cm. long, cylindric, smooth, shining. green and purple-marbled; leaflets generally 6, whorled, petiolulate with petiolules 5 mm. long, very variable even in the same leaf, obovate-cuneate or broadly lanceolate or oblong-lanceolate, all caudate-acuminate with acumination up to 4 cm. and capillary towards end, dark green above, paler beneath, shining, up to 22 cm. by 9 cm. intramarginal veins 2, nerves depressed above, prominent beneath. Peduncle up to 40 cm., cylindric thinner than petiole, of the same colour, but green near top Male spathe up to 30 cm. long, grass-green throughout, striped externally with white; tube elongate-cylindric, up to 8 cm. long, 2 cm. diam., widening into an ovate-lanceolate, long caudate-acuminate limb, 7 cm. long (without acumen) and 4 cm. broad, slightly reflexed near the tube, acumen 13 cm. long; limb deflexed, pendulous Male spadix up to 9 cm. long, exserted from the tube for 1 cm., conical in the flower-bearing part which is about 5 cm. long, appendix about 4 cm. long, straight, slightly thickened at the base, then more or less uniformly cylindric, blunt at tip. Stamens white, filaments stout, about 2 mm. long, usually 3 united carrying 6, sometimes 7-8 anther-lobes which are shortly ovoid or globular. Female spathe up to 45 cm., tube 10 by 2.5 cm; limb (without acumen) 13 by 6 cm., acumen 22 cm. Female spadix: Flower-bearing part about 5.5 cm. long, above female flower some neuters for 5 mm., appendix 4 cm long, like male. Female flowers arranged in many parallel dense spirals. Ovaries spherical or shortly oblong, green, unilocular, 1-3-ovuled; style very short, stout, green, stigma disk-like, white, covered with crystalline protuberances. Neuters above the female flowers up to about 17, subulate

*Abnormalities*: In a female spadix (call it incipient or atavistic androgynous spadix) were noticed above the female flowers 2 male flowers, each consisting of 2 filaments united below and free above, each filament with two distinct white anther-lobes separated from each other by a broad green connective.

Mixed with the neuters of a female spadix the following were observed:

(*a*) One bisexual flower on 2 pedicels united at the base: one pedicel bearing an undeveloped ovary and

well-developed style, the other pedicel one complete anther.

(*b*) Some male flowers: 1 filament with an anther-lobe.

(*c*) Some male flowers: 1 filament with a complete anther and connective.

Flowers and leaves seen at the same time. Spathe usually reaching to up below the leaf, the leaf thus protecting the flower; the spathe is never higher than the leaf. The spathes turn pale and then yellow.

*Locality*. Bombay Presidency: Mahableshwar, very common, covering large areas in the woods, also found on trees (Blatter No. P 10, type) —Flowered by the end of June 1925.

*Note*: This is one of the commonest plants in the woods of Mahableshwar during June and July. The straight stout peduncle and petiole surmounted by the large peltate leaf made up of 6 long-caudate leaflets and the long pendulous acumen of the spathe at once catch the eye. It is strange that this plant has not been observed by H. M. Birdwood or T Cooke or any other botanist Is it because it is a monsoon-plant when visitors do not stay at Mahableshwar? Or has it been mistaken for *A. Leschenaultii*, the only other *Arisæma* which the new species resembles? Cooke mentions two specimens of that species, but he has not seen them (vol. II, 821).

Hooker f. (*Fl.Brit. Ind*, VI, 504) gives "Western Ghats, from the Concan southwards" as locality for *A. Leschenaultii* I do not know on what specimens he founded that locality or whether he simply accepted Dalzell and Gibson's word, their specimen from "between Ramghat and Belgaum" not being at Kew. There are authentic specimens to show that the plant occurs in the Nilgiris and Ceylon. but nobody seems to have seen the true *Arisaema Leschenaultii* in the Bombay Presidency. Requires further investigation

The new species also resembles in some respects *Arisæma caudatum* Engler. This is a species only partly known. Hooker f. (*Fl. Brit Ind.*, VI, 508) had seen no specimen and described it from a drawing by Stocks who had seen the plant in the Konkan. Engler described the species, as he says himself, from a badly dried specimen. We reproduce Engler's description which is more complete than either Hooker's or Cooke's. It may help future botanists to identify the plant in the field.

*Arisæma caudatum* Engl in *DC. Mon. Phan.*, II (1879) 550, in Engler's *Pflanzenreich* IV, 23F (1920) 183, fig. 39; Hook. f. *Fl. Brit. Ind.*, VI (1893) 508; Cooke *Fl. Bomb.*, II, 822.

Leaf solitary. Dioecious (Hooker and Cooke speak of the spadix as androgynous), Petiole stout, narrowly sheathed; blade radiatisect; segments 7, oblong-elliptic, long and very narrowly acuminate, ending in an aristiform 1-1.5 cm. long

tip, shortly cuneate at the base, 15-17 cm. long, the middle segment 5 cm. broad, the lateral ones narrower, lateral nerves archingly ascending at an acute angle, 7-9 mm. distant from each other, united into an intramarginal nerve 2-3 mm. inside the margin. Peduncle much shorter than the petiole. Tube of spathe long-infundibuliform, 6-7 cm. long, above 2 cm. diam., margin of the throat slightly recurved, blade erect, oblong-lanceolate, about 8 cm. long, 3 cm. broad below, contracted into a narrow linear tail 8 cm. long. Inflorescence of spadix about 5 cm. long; appendix stipitate, thickened at the base, only 1.5 cm. long.

This plant has not been observed since Stock's time.

As I am just dealing with the genus *Arisæma* I wish to complete Hooker's and Cooke's descriptions of *Arisæma Murrayi* Hook. which are not always correct in every detail and sometimes ambiguous and misleading. This plant is one of the commonest at Panchgani, but it took me a long time before I was able to identify it with *A. Murrayi* simply on account of some general unqualified statements made by Cooke and Engler

*Arisæma Murrayi*, Hook. in *Bot. Mag*, (1848) t. 4388.

Tubers hemispheric, up to 5 cm. diam, root-fibres crowded arising from the upper side of the tuber, fleshy, white, rather tough. Sheaths broadly linear-oblong, or oblong-lanceolate, mucronate, lowest white, tipped purple, the others pale or dark purplish, the uppermost up to 30 cm. long, the lower much shorter. Leaf one, coming up shortly after the peduncle, but coexistent with the flower and finally reaching higher than the flower, peltate, glossy dark green on the upper surface, paler and shining beneath, divided to the base into 5-11 segments. Segments sessile, ovate-lanceolate-acuminate or oblong-lanceolate-acuminate or obovate-lanceolate, cuneate at base, with 2 intramarginal nerves, the outer faint, the inner distinct and about 1 cm. from the outer, otherwise penninerved, the nerves from the midrib meeting the inner intramarginal nerve, all the nerves depressed on the upper surface and very prominent on the lower, the central one very pale green, margin either entire or dentate-sinuate and wavy, length from 6-15.45 cm., breadth 4-6.15 cm., acumen 1.5 cm. Petiole 30-40 cm. long, 2 cm. diam. below, 1 cm. near lamina (in a specimen 60 cm. high), cylindrical, striate, stout, green or purplish-red or greenish purple or green streaked with purple, sheathed for one half or less. Peduncle 30-90 cm., green or purple, cylindrical, thinner than the petiole, and slightly thinner towards the apex, shorter or longer than the peduncle. Spathe striate, up to 14 cm. long, tube cylindrical, 2.5-6 cm. long, 1-3 cm. wide, grass-green inside and outside with white striae, especially upwards, slightly constricted at top and there broadening into a broadly ovate-acute or ovate-acuminate, somewhat cucullate limb, limb up to 11 cm., incurved, sometimes at a right

angle, at other times at 45° to the axis, pure white or sometimes with a green band or blotches along the centre, purple inside and outside where it meets the tube, the purple sometimes very faint or absent, especially outside, veins many, parallel, very distinct outside, faint inside, acumen mostly tinged with a bright green. Spadix narrowed from the base upwards, conical; appendage very variable, 3-7 cm. long, greenish at base, becoming deep purple above and lighter in colour at the tip, exserted (I have not seen it included in the tube). following more or less the bend of the limb, tapering to a fine point. Spadix androgynous or unisexual Androgynous spadix: Female flowers below, crowded, covering about 2-3 cm of the conical axis; ovaries arranged in many parallel spirals, sessile. style very short, stout, stigma disk-shaped, white: then follows an empty space of 3-4 mm. or the male flowers follow immediately, covering 1 2.5 cm. of the spadix, consisting of groups of 3-8, mostly 6 anther-lobes on a common very short stalk, sometimes a few subulate neuters above the anthers. Male spadix. Anther-bearing part up to 3 cm. long. 2-7, mostly 4 anther- lobes on a common stalk about 2 mm long, globose or shortly ovoid, opening by a slit on top. Female spadix never seen. Ovaries when ripe, bright red, variously compressed.

The anthers are faintly scented.—The plants with male spadices are generally only half the size of those with androgynous spadices

This is a most variable species as can be seen from the measurements given of the different parts and organs. When fresh the identity of the plant cannot be mistaken though at first sight some specimens are most puzzling; but if one has to deal with dried specimens only, one can easily feel inclined to make new species where there are only extremes of size or variation of shape of which in nature one finds an endless series of transition-forms generally not represented in herbaria.

The description prepared from one specimen in such a case must necessarily be wrong, unless it be supplemented by a number of notes referring to almost and correcting every detail mentioned in the description in order to give a complete and reliable picture of the species and not only of one specimen. But this kind of work can only be carried out with fresh material and with plenty of it. There is a vast field for the Indian botanist and we can help materially our colleagues in Europe who, in spite of their painstaking labour, have to confess in the end : "*Vidi siccum.*"

# On a new Theropod Dinosaur (Orthogoniosaurus Matleyi, n. gen. et n. sp.) from the Lameta beds of Jubbulpore

By H. C. DAS-GUPTA

## INTRODUCTION

The tooth that is described here was obtained from the green marly clay of the Lameta beds developed in the Jubbulpore Cantonment. These beds have been elaborately described by Dr. Matley [1] who has also given us a short account of the history of the fossil bones found at this locality from 1828 to 1917, when an interest in the study of the Lameta fossil reptiles was revived by Dr. Matley himself. I had an opportunity of visiting this locality in charge of a party of students from the Presidency College, Calcutta, in 1924, and succeeded in making a small collection including the tooth that is described below.

Orthogoniosaurus Matleyi n. gen. et n. sp. x 2.

## DESCRIPTION.

The tooth on which the genus *Orthogoniosaurus* is established is rather small in size, the preserved part measuring about 27 mm., compressed and with a posterior edge which is denticulated and straight. The serrations are rather blunt, set at right angles to the edge and possibly run along the entire length, though, on account of the incomplete nature of the lower part of this edge, nothing definite can be said regarding this point. The anterior edge is convex and not denticulate. The exposed face appears to be slightly convex.

## SYSTEMATIC POSITION.

Prior to 1917 only remains of Sauropod dinosaurs had been known from the Lameta beds, but it was the investigation of Dr. Matley which, for the first time, brought to light the remains of carnivorous and

[1] *Rec. Geol. Surv. Ind.*, Vol. 53, pp. 142–164, 1921.

armoured dinosaurs from this region. The carnivorous dinosaurian remains, according to Dr. Matley[1], include teeth of a megalosaurian type; while the armoured dinosaurian remains have been described as a new genus (*Lametasaurus*) by Dr. Matley[2]. Besides the megalosaurian teeth mentioned above, *Megalosaurus sp.* has also been recorded from the Cretaceous beds of Southern India by Lydekker[3], but the tooth that is described in this note is quite distinct from megalosaurian teeth which have got both their edges serrated. As remarked by Gilmore[4], 'the serrate edges on the anterior and posterior borders are characteristic of nearly all Theropoda' and I think that the absence of any denticulation on the anterior border is a sufficiently important character on which a new genus may be established. Among the Cretaceous Theropods *Orthogoniosaurus Matleyi* may be compared with one of the three teeth described as *Coelurus gracilis* by Lull[5], but the chief distinction between the tooth of *Coelurus gracilis* and that of *Orthogoniosaurus Matleyi* lies in the fact that the posterior edge of the former is concave, while that of the latter is straight.

In this connection attention may be drawn to a Theropod dinosaurian tooth originally described by Huxley[6] as *Ankistrodon indicus* and subsequently changed into *Epicampodon indicus* by Lydekker[7]. Recently von Huene[8] has expressed an opinion that *Epicampodon* is possibly the same as *Thecodontosaurus* and the Indian *Epicampodon indicus* is related to *Thecodontosaurus cylindrodon*[9]. The Indian Triassic *Epicampodon* (= ? *Thecodontosaurus*) *indicus* may be regarded as a very close ally of *Orthogoniosaurus Matleyi*, the relationship resting chiefly on the occurrence of the dental serrations which are found only on the posterior border which is also straight in both cases. The serrations of *Orthogoniosaurus Matleyi* are rather blunt and at right angles to the axis of the tooth and, in these respects, there is a great similarity between my species and *Thecodontosaurus cylindrodon* described as *Palaeosaurus cylindricum* by Riley and Stutchbury[10], as *Palaeosaurus cylindrodon* by Huxley[11]

---

1 *op. cit*, p 154. 2 *Rec Geol. Surv Ind.*, Vol. 55, pp. 105-109, 1924.

3 *Rec. Geol. Surv. Ind.*, Vol. 10, p. 41, 1877, and *Pal. Ind. Ser.*, IV, Vol. I, pt. 3, pp. 26-27, 1879.

4 *Bull.* 110, U. S. *Nat. Mus*, p. 92, 1920.

5 *Maryland Geol. Surv.*, Lower Cretaceous, pp. 187-188, pl. XV, fig. 1, 1911. Gilmore (*op. cit.*, p. 127) is of opinion that this identification has been made on very scanty evidence and is of doubtful value.

6 *Pal. Ind. Ser.*, IV, Vol. I, pt. 1, pp. 11-13, 1865.

7 *Cat. Fossil Reptilia and Amphibia in the British Mus.*, Pt. 1, p. 174, 1888.

8 *Geol. u. Pal. Abhandl.*, *Bd.* XII, p. 5, 1906.

9 *Geol. u. Pal. Abhandl. Suppl. Bd.* I, Lief. 5, p. 302, 1908.

10 *Proc. Geol. Soc. Lond.*, Vol. II, pp. 397-398, 1836.

11 *Q.J.G.S.*, Vol. XXVI, pp. 43-44, 1870.

and linked up with *Thecodontosaurus* by von Huene[1]. I would accordingly like to place the genus *Orthogoniosaurus* under the family of *Anchisauridae* (*Thecodontosauridae*).

---

1 *Geol. u. Pal. Abhandl.*, Vol. XVII, p. 81, 1914.

## Some Meteorological Proverbs of the People of Bengal

By CHINTAHARAN CHAKRAVARTI

In a paper entitled '*Meteorology in Ancient India*'[1] MM. Dr. Ganganath Jha has shown that meteorology as a science was cultivated in ancient India. He drew the attention of scholars to the fact that there were a good many works in Sanskrit which dealt with the subject either exclusively or incidentally (as in astronomical works). He brought together in his paper the meteorological information that was scattered in as early a work as the well-known astronomical work, the *Bṛhatsamhitā* of Varāhā-mihira (5th-6th century) traditionally associated with the court of Vikramāditya as a contemporary of the great poet Kālidāsa.

Stray sayings can, of course, be gathered from still earlier works. Thus the grammatical work, the *Mahābhāṣya* of Patañjali (3rd century B.C.) has a couplet—it may possibly be a quotation—which refers to the climatic effect produced by lightning assuming different colours. It runs :—

वाताय कपिला विद्युदातपायातिलोहिनी ।
कृष्णा सर्वविनाशाय दुर्भिक्षाय सिता भवेत् ॥[2]

"Lightning having a brown colour indicates storm, that having a deep red colour forecasts sunshine. Lightning with a black colour forebodes total destruction, while white-coloured lightning gives an indication of famine."

The *Kāśikā*, commentary on the grammar of Pāṇini, reads पीता वर्षाय विज्ञेया[3] as the third foot and this means 'yellow-coloured lightning should be taken as an indication of rains'.

There is also a Sanskrit proverb, according to which 'clouds in the west are not fruitless'.[4]

Meteorological beliefs in the form of popular sayings and proverbs—in some cases at least going back to a fairly old age—are also known to be prevalent in the various Indian vernaculars. A collection of these will be of some importance to the

---

[1] *Allahabad University Studies*--Vol. I (Allahabad, 1925)—pp. 1-11.

[2] *Mahābhāṣya*—Benares, Rajrajeswari Press ed., p. 186 (vol. II); Kielhorn—p. 449 (vol. I). The latter reads the third foot as पीता भवति सस्याय (yellow lightning indicates crops).

[3] Under Pāṇini II. 3. 13.

[4] अमोघाः पश्चिमे मेघाः ।

study of the development or popularity of the science in India. Students of the science may also investigate if some, at least, of these beliefs have any scientific bearing or they are all mere superstitions. Even if they are nothing but superstitions they are not of little importance to Anthropologists. Meteorological superstitions have almost a universal character being popular among various peoples of the world and a comparative study of them will be highly interesting.

Meteorological proverbs of the Bihar side have been collected in the *Bihar Peasant Life* of Sir George Grierson (pp. 281 ff.) and *Bihar Proverbs* of John Christian (Nos. 437 ff.). Almost the whole of class V of the latter work deals with meteorology.

These proverbs of Bihar are believed to have originated from a son of the celebrated astronomer *Varāhā-mihira* by a shepherd girl.[1]

In the present paper, I propose to collect some of the meteorological proverbs current among the people of Bengal. The collection does not, of course, claim to be exhaustive. I have gathered them from the sayings of Khanā and proverbs current among the people of my native district, Faridpur, in Eastern Bengal. Nos. 6–20 are attributed to Khanā, who is also traditionally connected with Varāhā-mihira. It is stated that Varāhā deserted his son, Mihira[2], on the ocean after his birth for his calculations went to show that he would be very short-lived. The child floated and reached the King of Ceylon who brought him up and got him married to his daughter Khanā. It is this Khanā, who had turned out to be a great astronomer like her husband and father-in-law, who is believed to be the author of these sayings.

Some of the proverbs collected here seem to be fairly old though the date of none can be determined with any amount of certainty. The value of at least some of these from the standpoint of meteorology needs be carefully studied as they are apparently based on a minute observation of atmospherical conditions. They are highly popular among the peasantry and boatmen of Bengal. It is from these proverbs that they take timely precautions against approaching rain and storm; and it must be admitted that they are not generally deceived. If, however, they err, they err on the side of over-precautiousness.

1. यत गर्ज्जे तत बर्षे ना ।

'As the roaring, not so the rains, *i.e.*, if the clouds roar much the showers will be little.'

2. Sometimes at the time of sunset the sky becomes unusually red. This is called रक्तसन्ध्या or red evening. A red

---

[1] Dr. Jha (*op. cit.*, pp. 2-3).

[2] It should be noted that according to this tradition, Varāhā and Mihira were the names of two different persons.

evening is supposed to give a forecast of the weather of the next day. The proverb runs :—

झड़ार सुखे खड़ा
खड़ार सुखे झड़ा।

'If the red evening follows a stormy day, there will be dryness (*i.e.*, cessation of rains); if it follows a dry (rainless) day, there will be storm.'

3. Clouds in the south are regarded as sure indications of rain in the months of Āṣāḍha and Śrāvaṇa (July-August); those in the north are believed to be similar indications of rain in the months of Caitra and Vaiśākha (May-June). North-western quarter is popularly called the stormy quarter and clouds in that quarter are supposed to bring about storm.

4. It is believed, in some parts of Eastern Bengal, that the weather condition of the month of Pauṣa (December-January) gives a forecast of the weather of the following year. The saying goes :—

आदि अन्ते निज मास
मीन थैते तुला।
मकर कुम्भ बिच्छा दिया
मास खाटाइया गेला॥[1]

'You (*i.e.*, the month of Pauṣa) pass away forecasting the weather conditions of the year: in the beginning (1½ days) and the end (1½ days) you give a forecast of your own (*i.e.*, the month of Pauṣa) [in the following year] and then [by every two days and a half] you give an indication of the weather conditions of the months beginning from Mīna (the sign of Pisces, *i.e.*, the month of Caitra) and ending with Tūlā (Libra—month of Kārtika) and then you forecast the months of Makara (Capricorn—month of Māgha), Kumbha (Aquarius—month of Phālguna) and Vicchā (Scorpio—month of Agrahāyaṇa).

5. ज्यैष्ठेर कुड़ि झड़ बय बुड़ी।

'Twentieth of Jyaiṣṭha and the storm becomes old, *i.e.*, loses its ferocity after the 20th of Jyaiṣṭha (May-June).'[2]

---

[1] Though highly popular it has undergone material changes from mouth to mouth and it is difficult to trace the original.

[2] But, as a matter of fact, storms in the months of *Āśvina* and *Kārtika* (September and October) are the most furious.

Sayings of Khanā.[1]

6. पौषे गरमि वैशाखे जाड़ा ।
प्रथम आषाढ़े भरबे गाड़ा ॥
खना बले शुन हे स्वामी ।
श्रावण भादर नाहको पानि ॥

'If the month of Pausa (December-January) is hot and there is cold in the month of Vaiśākha (April-May), pits will be filled in the beginning of Āsādha (June-July) [*i.e.*, there will be heavy rain].' 'Listen, O my husband', says Khanā, 'there will be no water (*i.e.*, rain) [in that year] in the months of Śrāvaṇa and Bhādra (July-August).'

7. चैत्रेते थर थर ।
वैशाखे झड़पाथर ॥
ज्यैष्ठेते तारा फुटे ।
तबे जान्बे बर्षा बटे ॥

'If there is shivering cold in the month of Caitra (March-April), hail and storm in the month of Vaiśākh (April-May), and stars become visible in the month of Jyaiṣṭha (May-June), know it [to be a year of] heavy rain.'

8. पौषेर कुया वैशाखेर फल ।
य दिन कुया स दिन जल ॥

'If there is fog in the month of Pauṣa (December-January) the effect of it will be [noticed] in the month of Vaiśākh (April-May). There will be rain for so many days as there was fog.'

9. शनिर सात मङ्गलेर तिन ।
आर सब दिन दिन ॥

'If the rain begins on Saturday it will last for a week, if on Tuesday, for three days, and in the case of other days it will last only for a day.'

10. बत्सरेर प्रथमे ईशाने बाय ।
से बत्सर बर्षा खनाय कय ॥

[1] The sayings in the present paper are taken from *Khanār Vacan*, with Bengali explanation, published by P. S. Bhattacharya (Srinath Library, 28/1, Beadon Row, Calcutta—1315 B S.).

'If in the beginning of the year (*i.e.*, in the month of Vaiśākha) wind blows in the North-east corner, there will be [heavy] rain that year—so says Khanā.'

11. भादुरे मेघे विपरीत वाय ।
से दिने झड़वृष्टि हय ॥

'If wind blows in the direction opposite to that of the cloud in the month of Bhādra (August-September), there will be rain and storm on that day.'

12. कि कर श्वशुर लेखा जोखा ।
मेघेइ बुझबे जलेर लेखा ॥
कोदाले कुड़ुले मेघेर गा ।
मध्ये मध्ये दिच्छे वा ॥
कृषकके बलगे बाँधते आल ।
आज ना हय हबे काल ॥

'What calculations do you make, O father-in-law? You will get indications of rain from clouds themselves. If clouds are of the spade-axe appearance [1] and there is occasional wind, you will ask the farmer to fix the ridge of earth dividing fields; for there will be [rain] to-morrow if not to-day.'

13. व्याङ् डाके घन घन
वृष्टि हबे शीघ्र जान ।

'If frogs croak frequently, know it, there will be rain in no time.' (Cf. *Ṛgveda* VII, 103.)

14. पूबेते उठिल:झाड़
डाङ्गा डोबा एकाकार ।

'If the rain-bow is seen in the east, land and pond will become the same (*i.e.*, there will be excessive rain).'

15. पश्चिमेर धनु नित्य खरा ।
पूबेर धनु बर्षे झरा ॥ [2]

---

[1] Pieces of cloud scattered in the sky are said to be of the spade-axe type.

[2] Another reading is कड़ा.

'If a rain-bow is seen in the west there will be eternal dryness, (*i.e.*, drought); if in the east there will be torrential or heavy rain.'

16. चाँदेर सभार मध्ये तारा ।
वर्षे पानि मुषलधारा ॥

'If there are stars within the halo of the moon, rain showers in torrents.'

17. दूर सभा निकट जल ।
निकट सभा रसातल ॥

'If the halo be at a distance from the moon, rain is imminent; if it is close to her there will be destruction (*i.e.*, on account of drought).'

18. बामुन बादल बान ।
दक्षिणे पेलेइ यान ॥

'Brahmin, shower, and flood go away as soon as they get *dakṣiṇā*, *i.e.*, the first goes away as soon as he gets the sacrificial fee and the last two subside as the southern wind blows.'

19. पूर्ण आषाढ़े दक्षिणा वय ।
सेइ वत्सर बन्या हय ॥

'If southern wind blows in the middle of Āṣāḍha (June-July) there will be flood that year.'

20. आमे धान ।
तेँतुले बान ॥

"If mangoes grow abundantly there will be much paddy; if there is a luxuriant growth of tamarind there will be flood."

Literally "paddy to mangoes; floods to tamarinds."

There are also various proverbs dealing with the effect of weather—specially its bearing on the agricultural products of the land. Some of these attributed to Khanā have been quoted by Dr. D. C. Sen in his *History of Bengali Language and Literature*[1] (pp. 20 ff.). I should conclude this paper with a reference to two sayings of Eastern Bengal pertaining to the effect of rain on the growth of fish and the climatic condition of

[1] Published by the Calcutta University.

the land. It is believed that rain on the last day of the month of Āśvina (September-October) has the effect of turning fish into snails. It is also said 'less rain double cold'.[1]

*P.S.*—Similar proverbs of Assam attributed to one Dāka who is supposed to have been a native of Lehi-dangara village in Barpeta have been given in *Asamīya Sāhityar Cāneki* or *Typical Selections from Assamese Literature* (University of Calcutta, 1929, Vol. I, pp. 128–133).

---

[1] ऊना वृष्टि दुना शीत।

# The Cult of Bāro Bhāiyā of Eastern Bengal

*(A form of Demon-worship.)*

By CHINTAHARAN CHAKRAVARTI

The study of the religious rites of the village folk of different parts of India is often very interesting. There are many such rites of which no trace is found in any scriptural text. But in spite of this they are respected as much as, and, sometimes even more than those that are specifically prescribed by the scriptures. They are highly popular among the rustic people, and even in higher society, especially among the womenfolk. In most cases, however, these rites have been given right scriptural forms, *i.e.*, the details of scriptural worship are strictly observed in them and the *mantras* chanted are in Sanskrit, sometimes, though rarely, interwoven with *mantras* in vernaculars. One notable peculiarity of these rites is their local importance and extremely limited spread. A rite is performed in one or two adjacent districts, other parts knowing nothing about it.

Some of these rites are undoubtedly ancient and retain palpable traces of primitive religion; though there are some which seem to have originated in a comparatively later period. On the whole their importance to students of Anthropology is considerable.

With the progress of modern civilisation most of these rites are fast falling into disuse and unless carefully prepared records of them are kept in time, they will soon be totally forgotten.

No comprehensive work in this line has as yet been undertaken. In Bengal descriptions of various rites of different districts are from time to time published in the vernacular periodicals and a few separate publications dealing with these matters are also known. But very few of them have been worked out in a real scientific spirit. And little has as yet been done in English to popularise these among the world of scholars. Several stray articles are all that have so far been presented to scholars through various Oriental and Anthropological Journals, a bibliography of which is under preparation by the present author.

In the present paper I am going to describe a peculiar cult that is prevalent in some districts of Eastern Bengal. My description is primarily based on my own observations in my native place at Koṭālipāḍā in the district of Faridpur. In other

places also similar rites are known to be performed. It may be styled the cult of Bāro Bhāiyā or Twelve Brothers, as the twelve brothers along with their mother (Vana-durgā) and sister (Rana-yakṣiṇī) are the chief objects of worship in it. It is popularly called the cult of Vanadurgā (the mother of the 12 brothers) or Niśānātha, Niśā, or Niśāi (one of the 12 brothers). It should be pointed out here that these brothers are described as demons (*daityas*) and their mother as 'the mother of demons' (*dānava-mātā*). They are all represented as being dreadful in appearance. As a matter of fact their demoniac character is abundantly made clear by their physical features as described in their *dhyānas*. They are all evil spirits as the names of some clearly indicate and as it is generally supposed that any displeasure or wrath on their part brings about diseases or other calamities. Of the names of these gods *gābhūra-ḍalana* means the oppressor (*dalana*) of the young ones (*gābhūra*);[1] *mocrā-siṃha* means 'the great one who strangles to death'; *niśā-nātha* means 'the lord of the night.' They are said to be always on the alert so that they cannot tolerate any disrespect on the part of the people who are therefore greatly afraid of them and are very particular in offering worship to them. One of these deities, *e.g.*, *vanadurgā*, has been described as a tree-goddess from the fact of her worship being offered under a tree and her having no separate image (S. C. Mitra in '*Man in India*', 1922, p. 228).

There is no fixed time for the worship of these deities. The worship is generally performed at day-time on Tuesdays and Saturdays (which days of the week are generally regarded as specially auspicious for Tantra worship), and specially on the occasion of prevalence of diseases in a family, to appease the wrath of the deities which is supposed to have brought them about. No images of these gods are generally known to be made The image of one of these brothers, *e.g.*, Hari-Pāgala (lit. Mad Hari) is however to be found in a house at the village of Unaśiā in Koṭālipāḍā.

The worship is performed at Koṭālipāḍā at the base of a big Aśvattha tree[2] in the aforesaid village of Unaśiā, the place being known as Niśāi-kholā or the place of worship of Niśāi. There is no provision for any daily worship here as in temples.

Nothing can be said as regards the antiquity of this worship. But this much is certain that the names of some of these deities bear undeniable traces of vernacular influence (cf. *Gāb-bhūra-ḍalana*, *Mocrā-Simha*, *Hari-Pāgala*) drawing our attention to the probability that the cult might have been prevalent

---

[1] I am indebted to my former teacher, Dr. S. K. Chatterji, for this interpretation.

[2] At other places the worship is performed under a *sheorā* tree or under a branch of that tree placed on the floor of a room.

originally among the unlettered mass, not unlikely outside the fold of Aryanism.

The process followed in the worship agrees fully with that laid down in the scriptures with regard to worship in general (*e.g.*, सङ्कल्प, घटस्थापन, गणेशादिनानादेवतापूजा, ध्यान, पूजा, बलि, etc.). Goats, buffaloes, and sheep are sacrificed for propitiating the deities. But the heads of the sacrificed animals are not taken back and are left in a hollow in the tree. It is probably for this reason that when promising sacrifices to these deities people are found to say, "We will present to you HALF a goat if my son is cured," etc. etc.

Mantras used in the worship are all in Sanskrit. In the manner of tantra worship monosyllabic *vījamantras* are associated with each of the deities. Several *mantras* in Bengali, as quoted below, are also chanted when offering the animals to the gods.

रक्तमुखी योगिनी रक्ततुण्डी मुइ छाग छिण्डोम्
हे चण्डि[1] तुइ रुधिर खा कालिकार आज्ञा।

Red-mouthed, red-faced, terrible witch, I shall sacrifice the goat. You take the blood—this is the order of (the goddess) Kālī.

त्रिनयन दशबाहु शरत्कालौ देवी चण्डि कालिका मा
मुइ छाग छिण्डोम् तुइ रुधिर खा कालिकार आज्ञा।

O mother Kālī, the terrible goddess, the Kālī of autumn with three eyes and ten arms, I shall, etc., as above.

असुरसंहारिणी त्रिदशेश्वरी सिंहवाहिनी चण्डि कालिका मा
मुइ छाग छिण्डोम् तुइ रुधिर खा कालिकार आज्ञा।

O mother Kālī, the terrible goddess, riding on a lion, the queen of the gods, the destroyer of the demons, I shall, etc., as above.

In some places the worship is performed by the lower class people alone, who sing, dance, and make merry. I have obtained two songs of these people from Dr. Surendra Nath Sen, M.A., Ph.D., of the Calcutta University, collected by him from his native district of Barisal. They run thus:—

"ओ मा चकचकानि ओ
बारो आवुला[2] बैचा मा तुइ
हैदरे ओला ओ"

---

[1] Here the name of the particular deity to whom the offering is to be made is mentioned and the direction is thus given in Sanskrit in the MS. :—यद्भे दैवताये अधिदेवः ये अधिक इत्यत्र सम्बोधनान्ततदेवतानाम प्रयोक्तव्यमिति विवेकः।

[2] In the place of बारो आवुला (twelve deities) the name of the particular deity is also mentioned.

"O Mother, come down to play with the 12 deities."

"स्वर्गेर झाड़िया झाड़िया झाड़िया रे
मर्त्ते नामिया फुल झरा रे
खोला चाइला रे"

"O sweeper of heaven, come down and shower flowers. Make the place of worship clear."

Leaving out of account these few lines in Bengali it will be seen how carefully the whole worship has been made to conform to the Tantra form. Most of the deities have been given Śivaite attributes and implements. Of the weapons and implements mentioned, matted hair (I, XII), the trident (IV, VII, IX), tiger's skin (XII, XIV), snake (I), axe (V), club (II, VII, VIII, XI–XIV), skull (I, IX) are all Śivaite. This points to the immense popularity attained by the Tantra form of worship. It shows how village cults were affiliated to Tantricism. We have here clear evidence of how a popular cult current possibly among people beyond the pale of Āryandom and thus having nothing to do with Sanskrit was later affiliated to Aryan culture. The first and most indispensable step for that purpose was this Sanskrit garb and the assimilation with the usual form of worship. Even from behind that garb the original state of things peeps through the vernacular names and *mantras*. This kind of borrowing or assimilation is not a rare or unknown fact in the chequered history of Hinduism. We shall not be surprised if later investigation traces this cult or its precursor to Pre-Aryan times.

The *dhyānas* give anthropomorphic details of the deities though no images are made. They are given below with English translations, for the purpose of drawing attention to the nature of the deities.

I. VANADURGĀ[1] (The Wild Durgā).

देवीं दानवमातरं निजमदाघूर्णच्छलालोचनाम्
दंष्ट्राभीममुखीं जटालिविलसन्मौलिं कपालस्रजम् ।
वन्दे लोकभयङ्करीं घनरुचिं नागेन्द्रहारोज्ज्वलाम्
सर्पाबद्धनितम्बबिम्बविपुलां व्याघ्रान् धनुर्बिभ्रतीम् ॥

---

[1] The worship of Vanadurgā is described in a slightly different form by Mr S. C. Mitra in *Man in India* (1922), pp. 228–41. But he does not refer to the anthropomorphic details of the goddess. Neither does he refer to the 12 brothers.

I bow to the Goddess, the mother of the demons, with big eyes whirling on account of her own intoxication, a face dreadful on account of the teeth, a head looking smart on account of tufts of matted hair, a garland of skulls,—fearful to the people, cloud-coloured, bright on account of a necklace of big snakes, huge with anklets covered with snakes, holding arrows and a bow.

II. KṚṢṆA-KUMĀRA (The Black Youth).

कृष्णवर्णं महाकायं खट्वाङ्ग[1]धारिणम् ।
श्वेताश्ववाहनं देवं रक्तमाल्यानुलेपनम् ॥

---

Various forms of a goddess of this name are mentioned. An eight-handed Vana-durgā is described by Gopinath Rao in his *Elements of Hindu Iconography* (Vol. I, Pt I, p. 343). A sixteen-handed deity of the same name surrounded by young maidens is referred to in the Tantra compilation *Iśāna-śivagurudeva-paddhati* (Trivandrum Sanskrit Series, Pt. II, pp 102–8). Three aspects of the deity seem to be represented by the four dhyānas that are given there. She should be worshipped in one or other of the aspects according as the worshipper aims at gaining (1) victory or protection, (2) wealth or Kingship, or (3) the destruction of enemies Her third aspect is thus described in two dhyānas. It will be noticed that in this aspect she shows a resemblance to our 'demon-mother'.

शङ्खं चक्रं धनुः कपालमुसले मुष्टिं गदामङ्कुशं
चक्रं खड्गधरौ त्रिशूलकुलिशप्रासाग्निपाशान् भुजैः ।
त्र्यक्षां तां दधतीं शरद्घननिभां व्याघ्राजिनात्ताम्बरां
सिंहस्थामहिभूषणां रिपुवधे शार्दूलविक्रीडिताम् ॥

One should meditate on that three-eyed, cloud-like deity who carries in her hands the conch, disc, bow, skull, mace, fist, club, hook, sword, arrow, trident, bolt, barbed dart, fiery noose—who has taken up tiger's skin as her cloth, who stands on a lion, has the snake as her ornament, and who plays (*i.e.*, moves) like a tiger on the occasion of killing enemies. [It will be noticed that the metre of this verse is technically called in metrology *śārdūla-vikrīḍita*.]

सिंहस्थां कथितास्त्रषोडशभुजां विद्युत्प्रभाभीषणां
रक्ताकल्पभुजङ्गहारवलयां त्र्यक्षां कुमारीगणैः ।
सन्नद्धां विविधायुधैः परिवृतां दुर्गां तथा मातृभि-
र्ध्यायेत् तां कुपितां महासुरवधे शस्त्रास्त्रधारामुचम् ॥

One should meditate on that three-eyed Durgā surrounded by the maidens and the mothers equipped with various weapons, riding on a lion, having sixteen hands (adorned with) the weapons mentioned above, terrible and bright like lightning, having red ornament and necklaces and bracelets of snakes, who is angry and drops showers of weapons on the occasion of killing great demons.

[1] 'A club shaped like the foot of a bed-stead, *i.e.*, a club or staff with a skull at the top (considered as the weapon of Śiva and carried by ascetics and yogins)'—M. Williams. According to T. Gopinath Rao it

स्मेरास्यं सुन्दरं शुभ्रं पिङ्गाक्षं पिङ्गकेशकम् ।
वन्दे कृष्णकुमारञ्च भयदं पीतवाससम् ॥

I bow to Kṛṣṇa-kumāra. a demon black in colour, big in body, terrific, beautiful and white,[1] holding a sword and a club, having a white horse as his carrier, a red garland and red ointment, a smiling face, tawny eyes, tawny hair, yellow cloth.

III. Puṣpa-Kumāra (The Flower Youth).

पुष्पहस्तं महाकायं पुष्पचापधरं[2] परम् ।
पुष्पमाल्यधरं कान्तं दिव्यगन्धानुलेपनम् ॥
तप्तकाञ्चनवर्णाभं वन्दे पुष्पकुमारकम् ।
रक्ताश्ववाहनं क्रूरं रक्तास्यं रक्तवाससम् ॥

I bow to Puspa-kumāra—the supreme, handsome, cruel, big in body, with flowers in hand—holding a bow and a garland of flowers, besmeared with celestial perfume, having the splendour of the colour of heated gold, red-faced, red-clothed, and having red horses as carriers.

IV. Rūpa-Kumāra (The Beautiful Youth).

वन्दे काञ्चनवर्णाभं द्विभुजं शूलहस्तकम् ।
सुन्दरात् सुन्दरं शान्तं नानापुष्पविहारिणम् ॥
रक्तनेत्रं रक्तवस्त्रं रक्तमाल्यानुलेपनम् ।
एवं ध्यात्वा यजेद्धीमान् दैत्यं रूपकुमारकम् ॥

I bow to the God with two hands, having the splendour of the colour of gold, with a trident in the hand, more beautiful than the beautiful one—the peaceful one who roams among various flowers, red-eyed, red-clothed, red-garlanded, and besmeared with red ointment. A wise man should worship the demon Rūpa-kūmāra meditating on him in this way.

---

is 'a curious sort of club, made up of the bone of the fore-arm or the leg to the end of which a human skull is attached through its foramen' (*Elements of Hindu Iconography*, Vol. I, Pt. 1, p. 7) Waddell in his *Buddhism of Tibet* (London—1895) translates it as pike and he gives a picture of it (p. 340-1).

[1] It is curious that the deity is described here in the same breath as 'black' and 'white'. But such contradictory statements are not rare in the descriptions of these deities (cf 'handsome' and 'terrible' in II, 'mad' and 'beautiful' in V). Repetitions of one or similar attributes, with respect to the same deity, are also met with. As a matter of fact, these descriptions show various defects of composition, not excepting grammatical and metrical inaccuracies which may not unlikely be due to the author's desire to give them an antiquated, epic appearance.

[2] चापं is another reading.

V. Hari-Pāgala (Hari the Mad).

उन्मत्तवेषं करपङ्कजाभ्यां
धृतं लगुडं[1] परशुं सपाशम् ।
आघूर्णितं निजमदैः स्खलितं[2] सुकान्तं
यजेन्महान्तं हरिपागलाख्यम् ॥

One should worship the great Hari-Pāgala who is very beautiful, whose dress is that of one mad, who holds a club, an axe, and a noose with his lotus-like hands, who whirls and slips on account of his own intoxication.

VI. Madhu-Bhāṅgara (The Breaker of the Honey-comb [?]).

रक्तास्यनेत्रं पिशुनस्वभावं
सदा यजन्तं[3] परिपूर्णवक्त्रम् ।
आघूर्णितं निजमदैः स्खलितप्रपादं[4]
ध्यायेत् सुदैत्यं मधुभाङ्गराख्यम् ॥

One should meditate on the good demon, Madhu-Bhāṅgara by name—red-faced and red-eyed—who is insincere in behaviour, who is always worshipping, who has a full face, who whirls and whose feet slip on account of his own intoxication.

VII. Rūpa-Mālin (The Beautiful).

स्वर्णमाल्यधरं श्वेतं स्वर्णवस्त्रं चतुर्भुजम् ।
शूलवज्रशरांश्चापधारिणं[5] सुमनोहरम् ॥
कृष्णाश्ववाहनं कान्तं कुमारं रूपमालिनम् ।
दीर्घवक्त्रं दीर्घकायं पाशखट्वाङ्गधारिणम् ॥

(Bow to) the youthful Rūpa-mālin—the white, the beautiful, and highly attractive—who has four hands, who carries a garland of gold, has a golden cloth, who holds a trident, bolt, arrows, a bow, a noose, and a club, who has a black horse as his carrier, and who is tall in body and has long arms.

---

[1] Correct metre would require a long ū instead of a short one.

[2] सदस्खलितम्—is another reading.

[3] जपन्तौ—is another reading.

[4] निजमदस्खलितप्रपादं—is another reading.

[5] According to rules of grammar no syntactical connection is possible between—शरान् and चापधारिणम् ।

VIII. GĀBHŪRA-ḌALANA (The Oppressor of the Young Ones).

दीर्घहस्तं दीर्घकायं पाशखट्वाङ्गधारिणम् ।
कृष्णवर्णं रक्तनेत्रं लम्बकर्णं ह्रस्वोदरम् ॥
रक्तवस्त्रधरं क्रूरं रक्तगन्धानुलेपनम् ।
गाभूरदलनं वन्दे सर्वलोकभयङ्करम् ॥

I bow to Gābhūra-ḍalana—cruel, terrific to the whole world, black-coloured, red-eyed, short-bellied—having big hands, a large body, and hanging ears, holding a noose and a club, wearing a red cloth and anointed with red sandal paste.

IX. MOCRĀ-SIṂHA (The great one who strangles to death).

रक्ताङ्गनेत्रो भयदो जनानां
शूलं कपालं[1] करपङ्कजेन ।
रक्तास्यहस्तः पिशुनस्वभावः
सदा जडो[2] भीममुखो विभाति ॥

There shines he with a dreadful face, red body and red eyes, red face and red hands—always dull, terrific to the people. cruel-behavioured, and (holding) a trident and the skull with the lotus-like hand.

X. NIŚĀ-NĀTHA[3] (The Lord of the Night).

कृष्णवर्णं रक्तनेत्रं निशाचौरं भयानकम् ।
शक्तिहस्तं दीर्घजङ्घं विकटास्यं दिगम्बरम् ॥
करालवदनं घोरं[4] शुष्कदेहं कृशोदरम् ।
ध्यायेत् सदाक्रोधयुतं घण्टाघर्घरवादिनम् ॥
रात्रौ चारमसिचर्मधरं विश्वतमस्तकम् ॥

One should meditate on Niśā-Caura—the terrible, the naked, black-coloured, red-eyed, ever angry—having a Śakti

---

[1] सपाशं is another reading. [2] सदाभरो is another reading.

[3] He is the principal deity of the group. It is not quite clear as to how he came to be styled Niśā-Caura (thief of the night). Popularly he is called Nisānātha, or simply Niśā or Nisāi. The dhyāna refers to him as *rātrau cāra* or night-rover and there is no implication anywhere to his stealing habit. The correct form, therefore, seems to have originally been *Niśā-cāra* which the scribe inadvertently might have changed to *Niśā-caura*.

[4] Another reading is चौरं ।

(weapon) in the hand. with tall thighs and terrific face, emaciated body and short belly—one who makes a rattling sound of bells, roves at night, has two hundred heads, and holds a sword and skin.

XI. SOOI-MUKHA (The Needle-faced).

दीर्घास्यनेत्रः पिशुनस्वभावः
सदा कृशाङ्गो भयदो जनानाम् ।
सूच्यग्रवक्त्रो [1] विरसः प्रमादी
खड्गाङ्कहस्तो विमुखो बभासे [2] ॥

He shone—he who has a long face and big eyes, an ever-emaciated body, a deceitful behaviour, a face like the point of a needle,—he who is terrific to the people, is careless, sorrowful, and has his face turned away.

XII. MAHĀ-MALLIKA (The Great Goose [?]).

विशालनेत्रः परिपूर्णवक्त्रो रक्तैः समांसैर्भयदो जनानाम् ।
करालदंष्ट्रः कमलासनस्थः कदम्बमाली कुटिलः कृशाङ्गः ।
श्रीमन्महामल्लिक एष भाति गोमायुरावी [3] द्विभुजो जटीयः ।
खड्गाङ्कधारी नृकपालमाली शार्दूलचर्मावृतसर्वगात्रः ॥

Here shines the handsome Mahāmallika—crooked and terrific to the people on account of blood and flesh—with large eyes, a full face, high, projecting teeth, emaciated body, two hands, a tuft of matted hair,—seated on a seat of lotuses—having garlands of skulls and *kadamba* flowers, covered all over the body with the skin of the tiger, holding the club, and making sounds like jackals.

XIII. BĀLI-BHADRA (Bāli the Good).

कृशाङ्गवक्त्रः स्फटिकाङ्कयष्टिः
रक्तोग्रनेत्रः कपिलाग्रकेशः ।
खड्गाङ्कहस्तः खरप्रभधारी [4]
स बालिभद्रः पशुहिंसकायः [5] ॥

---

1 सुरसवक्त्रो is another reading.

2 विभाति is another reading.

3 गोमायुनादी is another reading.

4 —रावी is another reading. 5 हिंसकायः is another reading.

He, the Bāli-bhadra, is emaciated in body and face, has a crystal slim body, angry eyes, tawny eyes and hair, carries the crow and the vulture, has a club in his hand, and has a murderous appearance like that of a beast.

XIV. Raṇa-Yakṣiṇī (The Yakṣiṇī of the Battle-field).

दीर्घाङ्गी दीर्घनेत्रा गुरुकुचयुगला घोरदंष्ट्रा कराला

रक्ताक्षी रक्तवर्णा[1] रुधिरचषकहस्ता मुण्डमालावृताङ्गी[2] ।

घण्टाखट्वाङ्गपाशान्[3] करयुगविधृता द्वीपिचर्म्मापिनद्धा

नित्यं मांसास्थिभक्षा रणभुवनगता यक्षिणी दीर्घवक्त्रा ॥

Yakṣiṇī, the dreadful, has a tall body, long face, large eyes, a pair of heaving breasts, terrible teeth, red eyes, a red colour, a cup of blood in the hand, holds the bell, the club, and the noose in her two hands—is covered by a garland of skulls, is clothed in the skin of the leopard, always feeds upon flesh and bones, and stays in the field of battle.[4]

---

[1] कृष्णवर्णा is another reading. [2] —वृताङ्गी is another reading.

[3] पाश is another reading. We have here a very loose syntactical connection.

[4] These *dhyānas* and other details of worship are taken from a manuscript belonging to and kindly lent by Pandit Govinda Chandra Vyākaranatīrtha. I had also the privilege of comparing two printed books on rituals, containing the details of the worship, published by the Sanskrit Book Depot and Sāraswata Pustakālaya of Calcutta. These latter books, however, do not refer to the Bengali mantras.

# An Ancient Indian Story in a Bengali Vratakathā

By Nilmani Chakravartti

Various rites and observances are current in Bengal. They are generally practised by the female section of the population. They may be classified under two heads, *viz.*, (1) those performed by the maidens, and (2) those performed by married women including the widows The second class may be further divided into two sub-classes, *viz.*. (1) the observances, the origin of which can be traced in some of the *Purāṇas*, notably in the *Bhaviṣya and the Skanda purāṇa*, and (2) those the origin of which cannot be so traced.

The observances of the maidens do not require any detailed worship The worship is performed by the maidens themselves and the *Mantras* are in Bengali verses, in which prayer for a good husband, prosperity of the father and brother, deprecations upon a co-wife, etc., are often present. No history of the origin of the observances has been handed down in the form of *Kathās* or stories. The second class of observances is often accompanied by a *Kathā* or story of the origin of that observance. The stories of the Pauranic observances are in Sanskrit, and those of the others are in Bengali. These stories are told by the mistress of the house. After the worship is duly performed by the priest the mistress of the house calls together all the female members who all remain fasting to listen to the *Kathā*. After listening to that and saluting before the deity, who is mostly a goddess, and praying for prosperity, they break their fast. During the whole day they generally take one meal only and abstain from fish or meat.

Many of the stories are now becoming obsolete with the passing away of old Hindu matrons. It is a fortunate thing that some of these stories have been collected and published. The most important publications on this subject are :—

(1) That published by the Baṅgiya Sāhityapariṣat and
(2) that published by late Babu Ashutosh Mukherjee.

It is not possible to say from what time these observances have become current, some of them at least are very old; *e.g.*, Lakṣmīpūjā or the worship of Lakṣmī, the goddess of luck. In the Veda we find the *Śrīsūkta*. In the early Buddhist literature we find mention of *Sirī*, and on the railings of the Bharhut stūpa we find a representation of the

goddess. In Bengal this deity is worshipped in every Hindu household. Unlike other deities she is worshipped several times in the year, *viz*, on the full-moon day of *Āśvina* (September-October), on the new-moon day of *Kārttika* (October-November), and during the bright fortnight of the months *Bhādra* (August-September), *Pauṣa* (December-January), and *Caitra* (March-April). On each occasion a separate story is told. It should be stated here that these stories are not always the same throughout Bengal. Considerable variations are to be found among the stories current in the East and the West Bengal. For the present paper we are concerned with the story relating to the Kojāgarī Lakṣmīpūjā which takes place in the night of the full-moon day of Āśvina. The story is to be found in the Vratakathā published by the late Babu Ashutosh Mukherjee.

The story runs thus:—In a certain country there was a king. He started a market and declared that he would purchase every thing that would remain unsold in the market. One day a man brought an image of Alakṣmī (Ill-luck) No one would purchase that. The king, true to his promise, purchased and brought that home. As soon as he brought home the image, his Lakṣmī (goddess of fortune) took leave in spite of the king's earnest entreaties. At the time of departure, however, the goddess granted him a boon which enabled the king to understand the language of all beings even of the ants and flies. With the departure of the goddess the king's fortune began to dwindle. One day the king ordered not to mix ghee with any of his dishes, and his order was obeyed. Some ants used to come daily to the spot where the king used to take his meal. On that day they began to say amongst themselves that the king was impoverished; he could not have even ghee to eat. Listening to their conversation the king smiled. The queen, who was standing by, asked the king the reason of his smile. But the king said "I cannot tell it. If I tell you I shall have to die." But the queen would not listen to what the king said. She began to importune the king to reveal the secret to her. The king at last yielded and told the queen to accompany him to the bank of the Ganges, with a view to die on the bank of the sacred river. When the king went to the river bank a pair of goats were grazing there and a bundle of grass was being carried by the current. The she-goat told to the male one to bring the bundle of grass to her to eat. The he-goat said "I cannot perish in the water for your sake. I am not a fool like the king to come to die for the sake of wife" The king understood the conversation of the goats and having soundly thrashed the queen drove her into the jungles and returned to the palace. Later on, the queen performed the worship of Lakṣmī on the full-moon day of

Āśvina, in the forest, and the ill-luck of the king disappeared and the queen was restored to her former position.

In the earlier literature of our country we meet with two fables which are similar to the above story. In the collection of Pāli Jātaka stories there is a *Jātaka* named *Kharaputta jātaka* (Fausböl Jātaka, Vol. III, page 273) which is in many respects similar to the above story and in the 35th sarga of the Ayodhyakāṇḍa of the Valmīki Rāmāyaṇa there is a story which bears some resemblance to the above. The *Kharaputta jātaka* and the story from the Rāmāyaṇa are briefly given below.

The Kharaputta jātaka:—There was in Benares a king named Senaka, who had intimate friendship with a Nāga-king. Once the Nāga-king was angry with king Senaka owing to a misunderstanding on the part of the former. He, however, came to realise his own fault and came and apologised and gave a *Mantra* (a secret charm) to Senaka, by repeating which he could understand the voice of all beings. At the same time the Nāga-king told Senaka not to impart the knowledge of the charm to anyone else, otherwise he would have to emolate himself by burning in fire. One day the king was taking cakes with honey and molasses. At that time a drop of honey, a particle of molasses, and a crumb of cake fell on the ground. An ant seeing that began to run to and fro saying that in the hall of the king a jar of honey was broken and a cart of molasses and a cart of cakes had been upset. "Come one and all and enjoy honey, molasses, and cakes." Listening to that the king smiled. The queen, who was standing by, began to think "why the king smiled". When the king, after finishing his meal, sat on the couch, a fly said to his companion "come let us enjoy". Thereupon she said "wait a little, presently they will bring perfumes for the king and when the king will smear his body with them, I shall sit near his feet and get my body perfumed by the particles falling from his body and then sitting on the back of the king we shall enjoy" Hearing that the king smiled and the queen began to ponder on the cause of the king's smile. At night when the king sat to take his food a lump of rice fell on the floor and an ant seeing that began to run to and fro saying sorrowfully that a cart of rice was broken and there was none to take rice. Hearing that too the king smiled. The queen, who was standing by, serving the king thought "surely the king laughed seeing me". At night when they lay down on the same bed, the queen asked the king the reason of his smile. The king said "you need not know that". But the queen was obdurate and the king at last disclosed to her the cause of his smile. Thereupon the queen requested him to teach the charm. The king said "If I teach the charm to you I shall have to die". The queen said "give me the charm even if

you die by giving it". The king was too much under the influence of the queen. So he consented and thought of emolating himself by entering into fire after imparting the knowledge of the charm to her and with this view he, riding a chariot, proceeded to the garden accompanied by the queen.

Sakka, the lord of the gods, having seen the affair, while surveying the world, thought "this foolish king is going to sacrifice himself to please his wife; I shall save him". Thinking thus he changed himself into a goat and transforming his wife into a she-goat came and appeared before the chariot. The king and the horses of the chariot could only see them. The goat (Sakka) in order to raise a conversation pretended to have sexual intercourse with the she-goat. Thereupon one of the horses said "we formerly heard that the goats are fools and shameless. Now what we see before us agrees with what we have heard". But the goat said "you are yourself a fool inasmuch as you are surrounded by rope, with your lips crooked and mouth bent. Another act of foolishness on your part is that being set free you would not flee and it is a greater act of foolishness on your part that you are carrying Senaka". Thereupon the horse said: "I admit that we are fools but why is Senaka a fool?" The goat said "He having got a valuable thing is going to give that to his wife and thereby he would sacrifice himself". The king hearing their conversation asked the goat "who he was". And when the goat declared himself to be *Sakka*, the king requested him to find out a way out of the difficulty. Sakka told the king to inflict some blows with the whip, as the preliminaries to the taking of the charm, and thereby she would not be willing to take it. Then the king went to the garden with the queen and asked her if she would learn the charm. On her answering in the affirmative, the king told her that she would have to observe the preliminaries. The queen enquired "what is that?" The king said "a hundred stripes will fall on your back but you will not be allowed to utter a cry". The queen consented. Thereupon the king ordered a servant to deal one hundred blows with a whip. The queen having endured two or three blows cried out saying that she did not require the charm.

The story in the Rāmāyaṇa runs thus:—When Kaikeyi insisted on banishing Rāma for fourteen years and installing Bharata on the throne, Sumantra began to scold her in presence of Dasaratha. He said "you are following your mother in your conduct. A *nim* tree never sheds honey. Your mother's conduct is well known to me. Your father obtained a boon from a sage by which he could understand the voice of all creatures. One night he heard the voice of a bird named *Jrimbha* and having understood that he laughed heartily. Your mother at that got angry and asked your father the

reason of his laughter. He said that he would have to die if he told her the cause. Your mother said 'whether you live or die you will have to say to me'. Thereupon the king went to the sage who granted the boon and he told him that he should not tell, whatever the queen may do. The king hearing the words of the sage came and drove away your mother".

The principal points of agreement and difference among the three stories are given below. The three kings obtained the secret from three places but though the sources are different the result is the same. In the story in the Rāmāyaṇa the king laughed hearing the voice of a bird, but in the other two stories the king laughed hearing the voice of an ant. Again in the Jātaka story the king laughed thrice but in the Vratakathā the king laughed only once. In the Rāmāyaṇa story the king at the advice of the sage drove away the queen, but in the two other stories, the kings went to die accompanied by the queen, with this difference that the king in the Jātaka went to the garden and the king in the Vratakathā, like an orthodox Hindu, went to the side of the Ganges. In the story in the Rāmāyaṇa there is no mention of the goats which are found in the other two stories, but the goats in the Vratakathā are mere animals, whereas those in the Jātaka are Sakka and his wife. In the Vratakathā the king and the queen are ultimately united but there is no such union in the other two stories. Again in the story in the Rāmāyaṇa and in the Vratakathā there is no mention of the imposition of the condition of death on divulging the secret to another although the kings declared that they would have to die if they divulge the secret. I wish to point out here that there is *nothing peculiarly Buddhistic about the Jātaka story. If we* exclude the introduction and the conclusion then it becomes an ordinary Indian story and there are many such stories in the Jātaka collection.

In conclusion it may be said that the story in the Rāmāyaṇa is the oldest and furnishes the basis of the Kharaputta jātaka and the Vratakathā contains the Jātaka story in a somewhat altered form.

ARTICLE No. 24.

## The Besthas of Nellore

By S. T. Moses

*Introduction.* The ethnology of our various Fishing castes to improve the socio-economic condition of which, among other things, the Department with which I am connected is devoting its attention, has always interested me. The work of recording observations on their customs, beliefs, etc., done during leisure hours was hitherto confined to the West coast and to some Tamil districts in the South Last year, however, as Assistant Director of Fisheries, Inland, I had opportunities of doing similar work in the Telugu districts and this paper embodies the notes on a Telugu fishing caste, the "Besthas" of Nellore.

*The Caste, its Names and Divisions.* Two common synonyms of the Besthas are 'Boya' and 'Mothirazu'. The first name survives in the appellation 'Boy' given to that familiar servant indispensable in Anglo-Indian households. The name 'Mothirazu' meaning 'Pearl Razu' indicated, as a proverb current among them says, the caste was as pure as a pearl. It has a variant in 'Machi Razu' (Fish Razu) and my informant related the story given by Thurston in his monumental work "The Castes and Tribes of South India" to account for the 'Mutrachas' having taken to fishing, as the one for the modification of the name Mothirazu into Machirazu. They were originally Kshatryas and so being among the twice-born wore sacred thread. Once a party of Mothirazus while returning home after a hunting excursion, saw plenty of fish in a pond and yielding to a sudden temptation they used their sacred threads as lines and started fishing. They were unfortunately seen by some Brahmans while thus engaged and so they not only lost caste but got their new name 'Machirazu'.

The Besthas form one single community without subsections. The endogamous subdivisions 'Telaga' and 'Parigirti' are no longer clear; all Besthas being Vaishnavites the subdivision 'Telaga' is perhaps extinct in Nellore. The 3rd division referred to by Thurston, 'Kabbili' or 'Kaberavandlu', seems unknown. Among the Balija or Kavarai, however, is a subsection named 'Kavaraivallu' whose occupation is 'fishing and fish-selling'. These people have, however, nothing to do communally with the Besthas.

Like all other Hindu castes the Besthas have house-names (Gotra or Intiperu) usually named after flowers. Some are named after crabs, prawns, and frogs (kappa). The frogs referred to here were explained to me to be not the true frogs

but the fish 'Ravana Kappa', the Jumping Goby (Periophthalmus). As usual the prohibitions eschewing members of the particular Gotra from handling the flower or animal giving its name to it are in vogue.

*Traditional Origin.* The Besthas claim descent from Sutudu, the famous expounder of the Mahabharata, whose ancestry is traditionally traced to the progeny of Hanuman, whose stone figures are common all over the Telugu districts, by his union with a Water-nymph.

*Occupations.* The occupation of the Besthas to-day is as 'cultivators, agricultural labourers, porters, messengers, land-owners, tenants, raisers of farm-stock, grass-sellers, fishermen, and sellers of fish.' The ancestral occupation of hunting and fishing is almost abandoned, many having taken to agricultural and miscellaneous pursuits. The fishing done by the Besthas who are fresh-water fishermen, par excellence, is confined to the irrigation tanks, channels, etc. Fishing therefore is possible only for a few months in the year. Besides, the quantity of fresh-water fish available in the district is, as compared to the supply from the sea, considerably small, though stocking operations have of late added enormously to the catches. It is no wonder therefore that all except the old and the otherwise unemployed have abandoned an occupation which keeps them going only during the hot weather when the tanks, etc., run dry. The industry of net-making which with net-mending is attended to by them just before the fishing season is negligible in its importance. Some Besthas are literate—their keenness in the matter of the education of their children is something uncommon among fisherpeoples—and seek employment under Government, in mercantile offices, or under private employees as peons and other menial servants. The changed conditions as regards transport to-day have deprived the Besthas of one of their important subsidiary occupations. It is indeed curious that both in the Malabar and the East coasts palanquin-bearing should have been associated with fisherpeople as one of their sidelines. During the days of the East India Company and earlier when transport facilities were practically non-existent and railroads had not been laid, the Besthas rendered useful service by carrying officials on palanquins on a system of daily wages. In recognition of these services the Nawabs gave them the right to catch fish in some irrigation tanks free of payment. Even to-day, the Besthas of Nellore town enjoy the fisheries of Nellore and Surveypalli tanks, a nominal annual rental of Rs. 200 being payable by them, under the old prescriptive conditions.

*Fishing Gear.* The basket traps and cruives which are fixed in paddy-fields and irrigation tanks and the *Edu vala*, a bag-net, also fixed in irrigation channels, are used for catching fish-fry and immature fish. Of the traps the *Jooua*, the one

most successfully used for catching the *Murrel*, and the *Koduma*, a bigger contraption, are popular. The last is placed along the channel crosswise, the side facing the current being that with the one hole and not that with two. This arrangement takes advantage of the habit of fish usually swimming against the current. The common net in use—' the insignia of the Besthas, as recorded in Conjevaram, is a net '—is the *Visuru vala*, the cotton cast net, circular in shape and weighted with tiny metal beads at regular intervals along the periphery.

*Ceremonies and Beliefs connected with Nets and Fishing.* New nets are used after pujah is offered to the deity, usually the goddess When a new net is shot, the first haul is carefully gathered to see if inauspicious brutes like snakes have got in. If a snake were to be found among the first catches the net is summarily rejected and never more used. The tortoise is another of the inauspicious creatures. Whenever it is found in the haul, be it the first or a later one, the net becomes polluted but not unfit for use The tortoise is let go at once but the net is used again only after it undergoes a cleaning ceremony at the hands of a Brahman priest and has holy water poured on it by him. When a new net is used for the first time and no unlucky creatures are in the haul one of the fish caught is taken and the net smeared with the blood and entrails of the fish; then a strand is broken from the net to be dropped later into fire along with incense. A net touched by a woman in her menses is unfit for use unless a *Punyahavachanam* ceremony is performed by the Brahman priest, as in the case of the net defiled by the arrival of a tortoise in its haul.

When poor fishing results from their labours, the Besthas believe that the goddess demands certain austerities of them and so sleep on bare or hard floor and even practise sexual abstinence, etc., for getting better results. They, however, do not apparently favour joint action for they believe that drag-nets, to work which several men are required, are unlucky and so do not adopt that method of fishing.

*Puberty, Marriage, and Childbirth Customs.* When a Bestha girl attains puberty she knots her hair up in a special way called 'Koppu'. She cannot during her first menstrual seclusion have her meals served in a metallic vessel as is usually done in her household; an earthen bowl is purchased for her exclusive use and later thrown away.

Marriage is, as a rule, of the postpuberty type, though child marriages seem to be not uncommon. Widow marriage is never permitted. Monogamy is the rule though under special circumstances a man is allowed to take a second wife, when the first is alive. If the wife is barren, or suffering from a loathsome disease like leprosy, or is of unsound mind, the headman of the caste may grant him permission to marry another. In all cases the wife is formally required to give her consent,

but if she is unreasonable, the headman can authorize the husband to go ahead without it. But in most cases it is, curiously enough, easily obtained.

Pollution after confinement usually ends on the 10th day. But in the case of the woman who loses her first born the period is shortened by 1 or 3 days then and for every subsequent confinement. The day of her bath after which she ceases to pollute falls then on the 7th or 9th day. A curious etiquette is observed among the Besthas on the bathing day. The woman friends of the convalescent mother visit her on that day and bring each a pot of warm water which is poured on her head during her bath.

The children are usually named after gods and goddesses, '*Iah*' being the termination usual among boys and '*Ammah*' among girls.

*Adultery and Divorce.* Laxity of morals is never tolerated in the community, and in fact severely punished, the delinquents being heavily fined or even excommunicated. If the outcastes are penitent, they are after sufficient time and on the payment of adequate penalties taken back into the fold.

Divorce is not easily obtainable. The complainant, wife or the husband, should produce sufficient cause for separation before such a decree is given by the headman. A curious feature in the divorce cases is that whoever the complainant, the husband has to pay the woman after the divorce a monthly maintenance allowance.

*Food.* As regards the dietary of the Besthas, all the usual animal and vegetable foods seem welcome except the taboos imposed on people because of their *gotras*. Tortoises are, however, universally avoided as food. The flesh of the monitor which is sometimes hunted after is a favourite article of diet. It is also preserved in the form of a powdery meal and is said to be of great medicinal value. The Besthas as a class are not so much addicted to drink as the usual run of fisherfolk though drinking is much in evidence during festivals and other gala occasions

*Caste Organisation.* The members of the community of each place obey a headman called the *Pedda* (great) *Boyadu* who is assisted by the *Padiyal* who is equivalent to the *Thandalkaran* of other castes. The *Pedda Boyadu* is accepted by the village community as the highest civil and judicial authority in the village, before whom all disputes among the members of the community are brought for settlement. All questions relating to morals, divorce, etc., are placed before him for final disposal. He has absolute powers to fine or outcaste the delinquents of the community. The posts of both the headman and his assistant are hereditary and they carry certain perquisites with them. These officers enjoy precedence over

others in the matter of being served with *Pansuparsi*, etc. during matrimonial and other functions.

*Religion*. The Besthas are Hindus by religion and worship the local deities along with other Hindu castes. *Vishnu* is worshipped all over, usually under the name *Parkvrathi*. Some even consider him as one of the village deities. Their favourite deities, however, are the goddesses (*Ishtadevatha*) to offer Pujah to whom they have constructed special places of worship called '*Mandirams*'. Here they congregate often to perform *Bajanas* or musical services. The priests officiating at the *Mandirams* are of their own caste. These conduct daily *Pujah* as also the annual festival when animal sacrifices are offered. A remarkable feature in connection with worship here is that ordinarily no animal flesh nor liquor is ever offered to the goddess. When fishing is successful and remunerative, it is celebrated by a grand festival with *Pujahs*, *Bajanas* and other demonstrations. This is often accompanied by much merrymaking and drinking. New nets are used only after *Pujah* to the goddess.

Marriages, funerals and purificatory ceremonies are performed by priests not of the Bestha community. Only Brahman priests are employed to officiate during such functions. The services of Bestha priests are often requisitioned by other castes in connection with festivals in honour of terrible deities like *Mariammah*.

*Habitations* The Besthas have no separate villages, '*Kuppams*' or '*Palayams*', as the sea-fishermen have. They live in villages and towns along with other Hindu castes, though their houses are often located almost together. Being mostly poor, the houses are huts with thatched roofs though the well-to do live in more substantial buildings.

*General Appearance* The men and women may claim to be classed as fair-skinned though most of them are sun-tanned. The men are tall in stature (Average height: 5 ft. 5 in, Maximum: 5 ft. 10 in. and Minimum. 5 ft 1 in) and healthy and robust in appearance, though not thick-set.

*Cranial and Nasal Measurements*. Measurements were taken at places wherever possible like Nellore, Kavali, Tangaturu, Chundi, and Surveypalli and the total number of individuals measured was only 47. The nasal index averaged 75 6, the maximum being 88·7 and the minimum 66·3. The cephalic index averaged 77·5, the maximum being 86 and the minimum 69·4

*Present Condition and Social Status*. Living as the Besthas do, with other communities, they offer a healthy contrast to the usual type of fisher-community by being cleaner, more literate and more responsive to good influences. In fact, they show signs of developing fast into a civilised caste. However, it is the unemployment problem that is keeping most of them poor

both in spirit and in worldly goods, and the general lot of the ordinary Bestha is rather pitiable. The Besthas occupy a low scale in the social status though the caste is considered to be high up among the low ones

## Religion and kingship in ancient times

By J. C. DE

The relation between the State and the Church cannot fail to interest the student of Anthropology, because it gives rise to problems, on the proper, equitable and speedy solution of which, much of the progress and happiness of all the races of mankind depend In the persecution of the early Christians by Imperial Rome, the burning alive of Lollards in mediæval England, the nine religious wars of modern France, the Thirty Years' War of disunited Germany, and the terrors of the Inquisition and iron-heeled despotism which crushed out the material of future national greatness in united Spain, lay the fruits of an extremely culpable and unwise political judgement. Modern England was not exempt The executions of the great More and others, the wail that followed the dissolution of monasteries, the butchering of prominent Protestants by Mary, the daughter of a no less cruel father, the obnoxious disabilities of various religious sects which remained in force till recent times, and the heartrending bitterness of the Anglo-Irish struggle at least in its modern phase, are a few of the evils which England had to face, for her inability to adjust the Great Relation in a calm and sympathetic spirit.

In the East also, the relation of the Throne to the Temple, the Mosque and the Church, aroused intense passion and bred interminable discussion. When the trumpet call of the Prophet Mahammad created something great out of almost a nonentity, and the Crescent swept on from country to country, till it floated triumphant in Africa and Europe, the question arose—was there any room for the non-believer under it? The gifted Mahomedan leaders rose to the occasion, and answered the question in a truly statesmanlike way for the moment, and great catastrophes were averted. But that was not the end, and many a Sultan in many a land allowed narrow bigotry to outweigh statesmanship. It is to the credit of the Turk, that he extended a measure of toleration to his Christian subject, which, though contemptuous, was certainly rare in contemporary Europe.

In India, one of the earliest religions was Hinduism. Causes of its decay however appeared soon. [1] The advent of the world-religion, Buddhism, patronised by the great Maurya, hastened the collapse, and Hinduism very probably sank into a religion of the minority. But the decline was temporary.

---

[1] Prof. De: Kālidāsa and Vikramāditya (p. 175).

Hindu sovereigns came to govern the destinies of India, and the revival of *aśvamedha* sacrifices sufficiently indicated the direction in which the wind was blowing. The revolt against the Saṅghas was really against the foreigner, the Turki, the Parthian and the Scythian, as well as of the old against the new, of conservatism against reform. Mr. Havell calls it "a re-awakening of the profound spiritual instinct" of the "race which found expression in a great renaissance" of "poetry, drama, and art" [1], and if we may add, the science of government. No accurate date can be fixed for it. It however, permeated the ideas and activities of the Hindu for centuries, and became as momentous to him, as the Renaissance which succeeded it nearly a thousand years afterwards, to the Christian. It blossomed forth thick and heavy during the Gupta Period which gave the Hindus that cultural comradeship which binds them even to-day.

The sources of information of this period on which reliance can be unhesitatingly placed, are the inscriptions on stone, copper and iron, the numerous coins issued by the various rulers, and the contemporary accounts of foreigners. Our knowledge from Hindu sources can be readily checked and supplemented by Buddhistic ones.

The action and reaction of religious on political life may be treated first.

The social position of a Hindu depended upon his belonging to any of the three higher castes, the Brāhmaṇas, the Kshatriyas and the Vaiśyas. The Śūdras occupied an inferior status. The Caṇḍālas, who perhaps belonged to the lowest stratum of the Śūdras, had to "live apart from others," and were "held to be wicked men." "When they" entered "the gate of a city or a market place, they "had to" strike a piece of wood to make themselves known so that men should avoid them" [2].

The fear of the spread of Buddhism, which taught the equality of men, made the Brāhmaṇas very jealous of their position. The ideal kept before them was rather high. They were expected to be (the inscription in question says that they actually were) "endowed with truth, patience, self-control, tranquility, religious vows, purity, fortitude, private study, good conduct, refinement and steadfastness," and "abounding in learning and penances, and free from the excitement of surprise" [3]. Such an ideal conceivably enabled the Brāhmaṇas to occupy the post of honour among their co-religionists on the ground of their worth. To kill or rob Brāhmaṇas was to commit one of the five great sins, and the guilty person was supposed to go down

---

[1] Havell: Aryan Rule in India—pp. 151-152.

[2] Legge, p 43; Giles, p. 21.

[3] F.G. I., No. 18, l. 8

to hell[1]. To marry the daughters of Brāhmaṇas to suitable bridegrooms, and to "dower them with *agrahāra* grants" on the occasion, were thought to be acts of merit, and Dāmodaragupta for example, is praised for doing so[2]. The respect shown to a Brāhmaṇa on account of his caste is also fully testified to by the copper charters of the period, a large number of which record the gift of land, vāpīs (cisterns), kūpas (wells), etc., by the princes to Brāhmaṇas for the "acquisition of religious merit" by the grantee, his parents and others.

We have also to remember that the Gupta Emperors themselves were probably Sūdras, while the majority of the numerous subordinate rulers of those days were probably Kshatriyas[3].

We come across some princes, for example, Mahārāja Matrivishnu and his brother Dhanyavishṇu, who were Brāhmaṇas by caste But apparently they were small in number

The Brahmanas were divided into various śākhās and caraṇas to facilitate the acquisition of a knowledge of the Vedas and the literature connected with them It seems that the culture of the day was propagated mainly by them

The Mānava Dharmmaśāstra (the code of Manu) and the Vāyu Purāṇa probably belong to the second or third century, the Yajnavalkya Smriti to the fourth, and the Nārada Smṛiti to the sixth century A.D. The science of astronomy was also greatly improved by Āryabhaṭṭa (born 476 A D ), Varāhamihira (505–587 A D.) and Brahmagupta (598 A D.), while the art of architecture was practised on a large scale with eminent success. The Mudrārakshasa was written by Viśākhadatta during the latter part of the fourth century, and the dramas of Kālidāsa were probably composed during the reign of Kumāragupta I. Painting as exemplified by some of the best frescoes at "Ajanta and the cognate works of Sigiriya in Ceylon (479 97 A.D.) was also practised with consummate skill"[5]. Some of the emperors themselves, the most noticeable instance being that of Samudragupta, were also scholars of a high order.

Though it is certain that all of these leaders of thought were not Brāhmaṇas, they however, generally speaking, were the finest exponents of the revived Brahmanical culture.

Raised by his social position, respected by his King, sanctified by a culture which placed him in the forefront, edified by the ideal of a virtuous life which was persistently kept before him, the hereditary Brāhmaṇa priest became a potent factor in the Hindu State.

---

[1] F.G. I., p. 38, n 4; No. 16. lines 11 and 12.

[2] F.G. I., No. 42. lines 9 and 10

[3] Beal: Si Yu Ki, Vol. II, p. 287.

[4] Dr. Barnett: Antiquities of India (page 90); Smith; E.H.I. 3rd Edition, p. 305.

[5] *Ibid.*, p. 306.

Even in our own day, we find that the interval of centuries has not been able to efface this characteristic feature of Hinduism. His Highness the Mahārāja of Alwar celebrated his jubilee in the afternoon of the 18th of January in a befitting way Surrounded by his chobdars and fan-carriers, seated on a golden throne, supported by his bodyguard in blue and gold on either side, faced by his hundreds of Sirdars and Durbaris wearing crimson turbans, and waited upon by thousands of his subjects, he presented a glorious spectacle It was "an imposing moment", "when the priests chanted prayers, and His Highness was sprinkled with holy water no less than 64 times." "Another was when His Holiness Śaṅkarācārya arrived at the Durbar." The Mahārāja descended from the throne, and the Swāmī "hung a necklace round his neck." Later on "the three chief high priests gave special blessings and lectures the latter lasting an hour each."[1]

The next interesting question which naturally arises is, "what was the attitude of this Brāhmanical state towards its Non-Brāhmanical subjects?" Brāhmanism, Buddhism and Jainism were the three principal religions during this period. Besides these, there were the followers of Devadatta who "made offerings to the three previous Buddhas, but not to Śakyamuni Buddha." Ninety-six heretical" sects other than the Devadattans are also mentioned by Fa Hsien [2].

Fa Hsien saw Buddhist monks and nuns all over Northern India At his first resting place after crossing the Indus, monks asked him about the Law of the Buddha [3]. In Udyāna (almost identical with the modern Swat Kohistan) he found Buddhism to be "very flourishing," and there were five hundred Hīnayāna Saṅghārāmas in that kingdom [4]. In Soo-ho-to (identical more or less with Buner), he noticed a tope of the Buddha "adorned with layers of gold and silver plates." In the kingdom of Purushapara (Peshawar), there were seven hundred monks in the Monastery of the Alms-bowl alone. "Of all the topes and temples which" Fa Hsien and his companions saw in their journeyings, there was not one which could be compared to this monastery "in solemn beauty and majestic grandeur" [5]. In Pe-t'oo, the country between the Indus and the Jhelum, Fa Hsien found both Mahāyāna and Hīnayāna monks who supplied him and his companions "with what they needed, and treated them in accordance with the rules of the Law" [6]. From Pe-t'oo to Mathurā the country was full of "a multitude of monks who might be counted by myriads." In

---

[1] *The Statesman*, Calcutta, Dak Edition, January 20, 1929.
[2] *Ib.*, p. 62. [3] *Ib.*, p. 27; cf. Giles, p. 10.
[4] *Ib.*, pp. 28 and 29: Giles, p. 11; Rémusat gives "seng kia lan" as the form.
[5] *Ib.*, pp. 30 to 35; Giles, pp. 12 to 15. [6] *Ib.*, pp. 41 and 42.

the kingdom of Sankāsya lying along the Jumna to the south of Agra, there were nearly a thousand monks and nuns, and at Kānyakubja there were two Hīnayāna monasteries[1]. At Śrāvastī Fa Hsien and his friends found a crowd of monks and a number of religious buildings, of which the Jetavana Vihāra was one[2]. "The inhabitants were" however "few and far between, amounting in all (only) to a few more than two hundred families." In Kapilāvastu also "all was mound and desolation" "Of inhabitants there were only some monks and a score or two of families of the common people"[3]. A celebrated tope at Rāmagrāma near which a monastery had been built by "the king of the country" not long before his visit, was also noticed by Fa Hsien[4]. In Gaya, at the place where the Buddha "attained to perfect wisdom" there were "three monasteries all of which were tenanted by monks"[5]. Hīnayāna monks were also found by the pilgrim at Kauśāmbī, and in the district of Bhagalpur there was a number of topes with monks residing in them all"[6].

The evidence is corroborated by the existence of some Buddhist inscriptions of the period[7].

Jaina inscriptions show that Jainism also existed, but probably was not a serious rival of the other two. The famous Jaina Council which codified the aṅgas also met at Valabhī during this period

The fact that the Gupta Emperors and the majority of the princes were Brāhmaṇical Hindus probably indicates that Hinduism was gaining fast on its rival, Buddhism. The numerous grants to Brāhmaṇas and their gods by the state and individuals together with the employment of Classical Sanskrit—the sacred language of Brāhmanism—in official inscriptions by the ruling potentates also lead to a similar conclusion.

The Brāhmaṇas are said by Fa Hsien to cut down the tree of the danta-kāshṭha (tooth-brush) of the Buddha, and quarrel with the śramaṇas about the shadow cast[8] on their temple by the Buddhist vihāra. They are said to hold "contrary doctrines" (*i.e.*, doctrines different from those of the Buddhists) and are called "malbelievers." Sung Yun says that the inhabitants of the country round Shen-chi hill believed that the son of Prince Sudatta and his sister had been beaten by a Brāhmaṇa with rods, "till the blood flowed down and moistened the earth"[9].

The currency of a story like that proves that an attempt

---

[1] *Ib.*, pp. 47, 51, 54. [2] *Ib.*, pp, 55 to 58. [3] *Ib.*, p. 64.
[4] *Ib.*, pp. 68 to 70 [5] *Ib.*, p. 89. [6] *Ib.*, pp. 96 and 100.
[7] e.g. F.G.I ; No. s 5, (93 G.E), 11, (129 G.E.), 62, (131 G.E.), 63, (135 G.E), 70, (230 G.E.). 71, (269 G.E.), 68, (C. 5th century A.D.) etc.
[8] Legge, p. 61.
[9] Beal : Sung Yun, p. xcviii ; also "Sung Yun" by the Nagri Pracharini Sabha, pp. 22, 23, 49-55.

was made by the Buddhists to create a feeling of animosity against the Brahmanas

Śaśānka the king of Gauda or lower Bengal is said to have exterminated Buddhism and consequently the groups of Brethren were all broken up [1] He tried to efface the foot prints of the Buddha on a stone near Pātaliputra and failing to do that he caused it to be thrown into the Ganges [2] Not content with this the enemy and oppressor of Buddhism (as Sasānka is called) cut down the Bodhi tree destroyed its roots down to the water and burned what remained From these stories it is quite apparent that a persecution of the Buddhists took place in Bengal and Magadha

The Hūna chief Mihirakula also is said to have been a persecutor of Buddhism to have destroyed all the priests of the five Indies and to have overthrown the Law of Buddha and left nothing remaining [3]

The performance of the *aśvamedha* sacrifice by Hindu emperors undoubtedly wounded the religious feelings of their Buddhist and Jaina subjects to whom the killing of the sacrificial horse must have been extremely repulsive

We must however remember that the instances we have cited above are not after all many and the small number itself is a proof though a negative one of the general prevalence of toleration

Moreover a close examination of the information available about Mihirakula one of the two persecuting kings of the period raises some doubts and difficulties He was certainly a ruler descended from a tribe settled in the steppes of Asia an admixture of the Chinese Hsiung Nu and Jung Hu [4] He had been grafted on a portion of Western India and had probably never assimilated the Hindu culture of his days A study of his career moreover convinces one of the extraordinarily ruthless traits of his character Yuan Chwang tells us that in his attack on Gāndhara he slew many people in cold blood gave some as slaves to his soldiers and took away the wealth of the country [5] The Rajatarangini mentions his wanton destruction of a hundred elephants and the massacre of millions of women with their brothers and husbands It is also significant that the Chronicle of Kashmir does not mention anything about the persecution of Buddhists Moreover the Buddhist accounts of Yuan Chwang and Hsui Wuh tell us that Mihirakula was a Buddhist and not a Hindu in the earlier

[1] Watters Yun Chwang p 43

[2] Watters p 93

[3] Beal Si Yu Ki Book iv p 168

[4] An unpublished article of Sir E Denison Ross kindly supplied to the author

[5] Beal Si Yu Ki pp 166 172

part of his career. We must also remember that Mr. Pāthak's identification of Caturmukha Kalkī, who, according to Guṇabhadra the author of the Uttarapurāṇa, persecuted the Jaina sect of the Nirgranthas, with Mihirakula, is very doubtful.[1]

On the other hand, instances and considerations leading to a contrary view are so numerous and weighty, that the historian cannot but conclude that the general attitude of the Hindu state towards the Buddhist and Jaina Churches was one of toleration.

The Buddhist, Fa Hsien, tells us that "the inhabitants" of Magadha vied "with one another in the practice of benevolence and righteousness." and "every year on the eighth day of the second month, they" celebrated "a procession of images" Among these images of Hindu gods, which were carried in a four-wheeled car, there were those of Buddhas seated in the niches "on the four sides" with Bodhisattvas standing in attendance on them"[2].

When Sung Yun—the Buddhist—fell ill near the Shen-chi hill, the Brahmanas seem to have taken care of him, and cured him by their charms[3] The ambassador in the course of his remarks on Peshawar, probably records the existence of a Brahmanical temple frequented by "all religious persons." He adds that a Buddhist vihāra called the White Elephant Palace existed not very far from the Hindu temple[4].

Emperor Candragupta Vikramāditya, the son of the great Samudragupta is officially described as being "specially devoted to Vishnu," and a person who conformed strictly to the precepts of his religion because he is not only called a Rājādhirāja but also a rishi or a saint[5] But his orthodoxy did not prevent him from employing non-Brahmanical officers of state The Udayagiri cave Inscription tells us that the Buddhist Āmrakārdava, who granted the village of Īśvaravāsaka and a large sum of money to the Buddhist monks of Sanci, was a person whose "means of subsistence" was "made comfortable by the favour of the feet" of Candragupta II (Candragupta-pādaprasād-āpāyita-lvita-sādhanah). His munificent donation to the vihāra shows that he was a person of consequence. The fact that he "acquired banners of victory and fame in many battles"[6] shows that he probably held commands of the imperial armies. Fa Hsien tells us that the ruler of Mathurā—who must have been one of the governors of Candragupta—supplied "food with his own hands to the monks", and showed great respect to them[7]. The very existence of a great number of prosperous

---

[1] Uttarapurāṇa, verse 396, Caturmukhāhvayaḥ kalkī rājodvejitabhutalaḥ: Bhandarkar Commemoration volume, pp. 216 and 217.

[2] Legge, p. 79; Giles, p 47.

[3] Beal—Sung Yun, p. xcviii.

[4] Beal—Sung Yun, pages cii and ciii.

[5] F.G. I., No. 6, l. 2.

[6] F.G I., No. 5, l. 4.

[7] Legge, p. 42.

Saṅghārāmas all over the country during his reign, also proves that the emperor did not like to interfere with the religious practices of his subjects.

In the Valabhi grants, the phrase, mātā-pitroḥ puṇy āpāyanāyātmanascaihikāmushmikayathābhilashitaphalāvāpti-nimittaṁ [*i.e.*, for the increase of the spiritual merit of parents, and for the attainment of blessings in this life and the life hereafter to the utmost limit of (the grantee's) desires] occurs, in grants to Brāhmaṇas [1] for performance of the agnihotra, atithi and the three Mahā-Yājṇas, as well as in those for the upkeep of vihāras, feeding of bhikshus, and supply of perfume incense and oil for lamps placed before images of Buddhas [2].

It is therefore apparent that even a parama-bhāgavata Hindu ruler thought that a grant for Buddhist religious purposes would lead to an increase of religious merit in the same way as one for Brahmanical purposes would. In at least one grant to Buddhists, we find that ślokas from the Hindu epic, the Mahābhārata, were quoted We also remember that the parama-māheśvara (the devout worshipper of Śiva) Guhasena I. granted four villages with all appurtenances to the Śākya. Bhikshusaṅgha (or the Community of Buddhist monks) belonging to several Hīnayāna schools attached to the monastery of Duddā to provide the necessary expenses for their food, clothing, bedding, and medicine. The object of the grant was to increase the religious merit of himself and parents.[3]

One other fact that supports our contention is that grants for religious purposes were freely made by Buddhist and Jaina citizens and publicly recorded on stone. Thus we find that the two Śākya bhikshus who lived in the same village of Tishyāmratīrtha granted a Buddhist stone statue, found at Bodh Gaya. The fact that the king's name is not mentioned in the inscription leads to the presumption that the religious gift was considered to be valid even without the express sanction of the reigning king [4]. The same remarks apply to the gift of a pillar at Sanci in the Bhopal state by a vihārasvāmin, and of a Buddhist image, discovered in the excavations of Bodh Gaya, by the Śākya bhikshu, the Sthavira Mahānāman [5] Mahānāman is said to be the resident of Āmradvīpa or the Mango-Island which Cunningham identifies with Ceylon, because it resembles a mango in shape. We may also point out that there is an Indian tradition which asserts that mangoes were introduced into India from Ceylon. Dr. Fleet thought it to be probable that this

---

[1] e.g. E.I., vol. III, pages 320 to 322.
[2] e.g. in plates of the same prince in J.R.A.S., Vol. XXVII.
[3] I.A., IV, p. 175, l. 5.
[4] F.G. I, No. 76.
[5] F.G. I., No. 72.

Mahānāman was "the person of that name who composed the more ancient part of the Pāli Mahāvaṁsa" [1].

Such instances can be easily multiplied. In the Gorakhpur district of the United Provinces of Agra and Oudh, Madra set up five stone images of the five Jaina Tīrthaṅkaras and recorded this presentation in an inscription of twelve lines on a grey sandstone column. The approval of this gift by the Hindu Emperor Skandagupta is apparent from the mention of his name and occurrence of his eulogy in the body of the inscription Madra, who was apparently a Jaina, reflects the generally tolerant spirit of the age, and his inscription-writer expressly mentions that he was "especially full of affection for Brahmaṇas, religious preceptors and ascetics" [2]

Another notable fact is that classical Sanskrit, the sacred language of Hinduism, was employed to record gifts and presentations of rival religions.

We therefore naturally come to the conclusion that toleration of the religion of the subject was the rule, and persecution an exception during this period of Hindu ascendancy.

---

[1] F.G. I., p 275. [2] F.G. I., No. 15.

# On a Type of Sedentary Game prevalent in Shahpur, the Punjab

By HEM CHANDRA DAS-GUPTA

The game that is described in this note is a type of tiger-play prevalent in the district of Shahpur in the Punjab. It is known locally as the game of *sher-bakr*, *i.e.*, tiger-goat. The details of the game were obtained from the sub-assistant surgeon in charge of the charitable dispensary of Pail (Shahpur) in the Salt range, a locality I had an occasion to visit during the Puja vacation of 1929 in connection with some geological work. The diagram that is used for playing this game is given below:—

Two persons are necessary for playing this game, one being in charge of one piece, the tiger, and the other in charge of four pieces, the goats. At the commencement of the game the four goat pieces are to be kept at *A* and the tiger piece at the apex of the triangle, *i.e.*, at the point marked 1. The possessor of the goat pieces has to move one of his pieces first and then the usual rule is followed according to which a goat piece and the tiger piece can be moved only from one cross-point to another. But there are two rules of this game which are worthy of special notice. In all types of tiger-play which have hitherto been recorded, *e.g.*, from Orissa,[1] Tibet,[2] Sumatra,[3]

[1] *Journ. Asiat. Soc. Bengal*, N.S., XXII, 212-213, 1926.
[2] Riu-chen-dha-Mo (Mrs. Louis King): We Tibetans, 141-143, 1926.
[3] *Tidjschr. Ind. Taal-,Land-en Volkenkunde*, Deel LVIII, 8-10, 1919.

Kolhan,[1] Eastern Bengal,[2] Mianwali,[3] and British Garhwal,[4] the tiger piece may jump over a cross-point occupied by a goat piece provided the cross-point next to it and in the same straight line is vacant and capture the goat piece. According to the rules of the game as prevalent in Shahpur, the tiger piece may capture the goat piece in this way, while it may also, for the purpose of capturing a goat piece, jump round the angle *A* either from 2 to 4 or from 4 to 2. This is a type of movement which has not been hitherto recorded from anywhere as far as my information goes. It may also be pointed out that there cannot be more than one goat piece on one cross-point though at the angle *A* there may be more goat pieces than one. If, however, the tiger piece succeeds in jumping over *A* and if at that time there are goat pieces more than one only one piece may be captured, recalling in this matter the rules of game prevalent in Mianwali and British Garhwal. Another important peculiarity to be noted in connection with this game is the form of the diagram used for playing it. All the diagrams known hitherto in connection with tiger-play are of a square or rectangular type and a triangular diagram, as depicted above, does not appear to have been recorded from anywhere else. The goats try to checkmate the tiger and this attempt cannot succeed unless all the four goats are in activity; hence if only one goat is captured the owner of the tiger piece is victorious.

---

[1] *Man in India*, Vol. V, 196–198, 1925.
[2] *Quart. Journ. Bangiya Sahitya Parishad*, XIV, 240–241, 1314 B.S.
[3] *Journ. Asiat. Soc. Bengal*, N.S., XXII, 145–146, 1926.
[4] *Ibid.*, N.S., XXIII, 297–298, 1927.

# Synthesis of a few Antimonials of Therapeutic Interest

By U. N. BRAHMACHARI *and* J. M. DAS GUPTA

The present paper contains an account of some organo-metallic antimonials, which have been synthesised by us with the same object in view, as in the case of the compounds described in a previous paper contributed by us to this *Journal* (Vol. XXV, 1929, No. 1). They are amorphous and extremely difficult to purify. The chemical operations involved in their preparation are given below. As regards toxicities, we have noticed that in these as in the previous compounds the general rule holds, *viz.*, introduction of sulphoxyl groups lowers the toxicities to a considerable extent with a decrease in the therapeutic value. The nature of the basic portion also affects, to some extent, the stability and the toxicity of the compounds, *viz.*, urea or diethylamine salt is sometimes more stable and less toxic than the corresponding sodium salt. Our object in the preparation of the following compounds is to study these latter effects as well. The compounds are not very stable, though their solutions do not decompose on standing in air for 24 hours. The following is a list of the compounds investigated by us in this paper :—

1. Sodium salt of phenyl-glycine-amide-4-stibinic acid.
2. Urea salt of the same.
3. Diethyl-amine salt of the same.
4. Carbamino-*p*-stibanilate of sodium.
5. Carbamino-*p*-stibanilate of urea.
6. Carbamino-*p*-stibanilate of diethyl-amine.

It will be seen that all the above compounds undergo polymerization (see below).

## EXPERIMENTAL.

(1) Sodium phenyl-glycine-amide-4-stibinate.

$$
\begin{array}{l}
\qquad\qquad\qquad\qquad\qquad\quad ONa \\
NH_2.CO.CH_2.NH.C_6H_4.Sb\!<\!=O \\
\qquad\qquad\qquad\qquad\qquad\quad O \\
NH_2.CO.CH_2.NH.C_6H_4.Sb\!<\!=O \\
\qquad\qquad\qquad\qquad\qquad\quad O \\
NH_2.CO.CH_2.NH.C_6H_4.Sb\!<\!=O \\
\qquad\qquad\qquad\qquad\qquad\quad OH
\end{array}
$$

*p*-stibanilic acid is dissolved in the requisite quantity of NaOH solution and the concentrated solution of sodium *p*-stibanilate is added gradually to an excess of absolute alcohol, when a precipitate of sodium stibanilate is produced, which is next filtered and washed with absolute alcohol and then dried. 5 grms. of sodium stibanilate are then dissolved in methyl alcohol and treated with chloracetic ester and the whole refluxed for several hours. After the reaction is complete, the methyl alcohol is distilled off and the rest acidified with dilute HCl. The precipitate thus obtained is filtered and washed with water and then treated with concentrated ammonia. After some time, the solution is filtered and the filtrate is reprecipitated by acetic acid, when the glycine amido derivative is obtained, which is next washed with distilled water. The precipitate is then dissolved in dil. NaOH, filtered and the filtrate precipitated by adding absolute alcohol. The precipitate is then repeatedly washed with absolute alcohol and dried in a vacuum desiccator.

It is an almost white coloured powder, very easily soluble in water to a perfectly clear solution, which gives neutral reaction to litmus paper. On warming with dilute alkali it gives out ammonia. The compound prepared according to the above process has been called $X_{10}$, a paper on the therapeutics of which has been published by us in the Transactions of the Royal Society of Tropical Medicine and Hygiene. The method of preparation of the compound described here is better than the one originally described by one of us (U. N. B.) in the *Ind. Jl. of Med. Res.*, 1922.

Composition :—

Dried material corresponds to the formula :

$(NH_2CO.CH_2\,NH.C_6H_4.SbO)_3.O_2(OH)(ONa).$

$=C_{24}H_{28}O_{10}N_6Sb_3Na.$

Found $Sb=38{\cdot}40\%$, $N=8{\cdot}72\%$.

Calculated for $C_{24}H_{28}O_{10}N_6Sb_3Na$. $Sb=38{\cdot}17\%$, $N=8{\cdot}90\%$.

This compound is the polymorized antimony analogue of tryparsamide.

(2) Phenyl-glycine-amide-4-stibinate *of* urea.

$(NH_2CO.CH_2.NH.C_6H_4.SbO)_3O_2(OH)(ONH_3.CO.NH_2).$

Phenyl-glycine-amide-4-stibinic acid, as obtained in the previous experiment, is made into a paste with little water, and then well mixed with an excess of urea. The whole is then warmed for some time when the acid gradually dissolves to a reddish solution, yielding a urea salt. The solution is then filtered through a Buchner funnel, and the clear filtrate pre-

cipitated by acetone. The precipitate thus obtained is dried in a vacuum desiccator after well washing with absolute alcohol.

The product is a light coloured powder easily dissolving in water to a perfectly clear solution, which is neutral to litmus paper.

Composition :—

Dried material corresponds to the formula :

$(NH_2CO.CH_2.NH.C_6H_4.SbO)_3O_2(OH)(ONH_3.CO.NH_2)$

$= C_{25}H_{33}O_{11}N_8Sb_3$.

Found $Sb = 36{\cdot}58\%$, $N = 11{\cdot}55\%$.

Calculated for $C_{25}H_{33}O_{11}N_8Sb_3$. $Sb = 36{\cdot}69\%$, $N = 11{\cdot}41\%$.

(3) Phenyl-glycine-amide-4-stibinate of diethyl-amine.

$(NH_2.CO.CH_2.NH.C_6H_4.SbO)_3O_2(OH).OH_2N(C_2H_5)_2$.

The starting material in the preparation of this compound is the same as in the previous cases. This is well mixed with a small quantity of water, and to the mixture a 30% solution of diethylamine in water is gradually added shaking it very well at the same time. Almost a clear concentrated solution is thus obtained, which is filtered and the reddish filtrate poured drop by drop into 5 times its volume of absolute alcohol. A voluminous precipitate is produced, which is allowed to settle down for some time and then filtered. The precipitate is washed well with absolute alcohol, and then dried in a vacuum desiccator.

It is a light grey coloured powder easily dissolving in water to a clear solution, which is neutral to litmus paper.

Composition :—

Dried material corresponds to the formula :

$(NH_2.CO.CH_2.NH.C_6H_4.SbO)_3O_2(OH).OH_2N(C_2H_5)_2$

$= C_{28}H_{40}O_{10}N_7Sb_3$.

Found $Sb = 36{\cdot}42\%$, $N = 9{\cdot}71\%$.

Calculated for $C_{28}H_{40}O_{10}N_7Sb_3$. $Sb = 36{\cdot}21\%$, $N = 9{\cdot}85\%$.

(4) Sodium carbamino-*p*-stibanilate.

$$
\begin{array}{l}
\phantom{NH_2.CO.NH.C_6H_4.Sb<}ONa \\
NH_2.CO.NH.C_6H_4.Sb \lt {=}O \\
\phantom{NH_2.CO.NH.C_6H_4.Sb<}O \\
NH_2.CO.NH.C_6H_4.Sb \lt {=}O \\
\phantom{NH_2.CO.NH.C_6H_4.Sb<}O \\
NH_2.CO.NH.C_6H_4.Sb \lt {=}O \\
\phantom{NH_2.CO.NH.C_6H_4.Sb<}OH
\end{array}
$$

The starting material in the preparation of this compound is sodium *p*-stibanilate, produced by neutralising *p*-stibanilic acid with NaOH solution, the acid itself being obtained by hydrolysing acetyl-*p*-stibanilic acid which is a product of Bart's reaction applied to acetyl-*p*-phenylene diamine. 5 grms. of sodium stibanilate thus obtained are dissolved, at low temperature, in glacial acetic acid. To this well-cooled mixture is gradually added about 4 grms. of potassium cyanate and the mixture well stirred till a clear solution is obtained. The solution is then allowed to remain in this state for many hours. The mixture is then diluted with water and well stirred. Concentrated HCl is then gradually added which dissolves the unreacted *p*-stibanilic acid and precipitates the carbamino derivative as a voluminous mass, which is then filtered and washed with water. The wet precipitate is then dissolved in the requisite quantity of dilute NaOH solution and the reddish solution thus obtained is filtered. The filtrate is precipitated by absolute alcohol and the precipitate washed with the same and then dried in a vacuum desiccator.

The product is almost a white powder readily dissolving in water to a clear solution which is neutral to litmus paper.

Composition :—

Dried material corresponds to the formula :

$(NH_2CO.NH.C_6H_4.SbO)_3O_2.OH.ONa.$

$= C_{21}H_{22}O_{10}N_6Sb_3Na.$

Found Sb = 39·62%, N = 9·29%.

Calculated for $C_{21}H_{22}O_{10}N_6Sb_3Na$. Sb = 39·95%, N = 9·32%.

(5) Carbamino-*p*-stibanilate of urea.

$(NH_2.CO.NH.C_6H_4.SbO)_3.O_2.OH.ONH_3.CO.NH_2.$

Carbamino-*p*-stibanilic acid as obtained in the previous case, is made into a paste with little water and then well mixed with a slight excess of urea. The mixture is then warmed on a water-bath when the acid gradually dissolves to a clear solution. The solution is next filtered and the filtrate precipitated by acetone.

It is a light grey coloured powder which dissolves easily in water giving a neutral solution.

Composition :—

Dried material corresponds to the formula :

$(NH_2.CO.NH.C_6H_4.SbO)_3.O_2.OH.ONH_3.CO.NH_2.$

$= C_{22}H_{27}O_{11}N_8Sb_3.$

Found Sb = 38·50%, N = 11·85%.

Calculated for $C_{22}H_{27}O_{11}N_8Sb_3$. Sb = 38·34%, N = 11·92%.

(6) Carbamino-*p*-stibanilate of diethyl-amine.

$(NH_2.CO.NH.C_6H_4.SbO)_3.O_2.OH.ONH_2.(C_2H_5)_2$.

As in the previous experiment a paste is made by mixing carbamino-*p*-stibanilic acid with little water to which is then gradually added a 35% solution of diethyl-amine in water. The precipitate gradually dissolves, giving a clear solution which is filtered, and the filtrate reprecipitated by acetone.

It is a pale greyish powder which dissolves readily in water.

Composition :—

Dried material corresponds to the formula :

$(NH_2.CO.NH.C_6H_4.SbO)_3.O_2.OH.ONH_2.(C_2H_5)_2$.

$= C_{25}H_{34}O_{10}N_7Sb_3$.

Found Sb=37·62%, N=10·31%.

Calculated for $C_{25}H_{34}O_{10}N_7Sb_3$. Sb=37·81%, N=10·29%.

REFERENCES.

1. *Journal* and *Proceedings*. Asiatic Society of Bengal (New Series), Vol. XXV, 1929, No. 1.
2. Transactions of the Royal Society of Tropical Medicine and Hygiene, Vol. XXIII, No. 6, pp. 617–622, April, 1930.